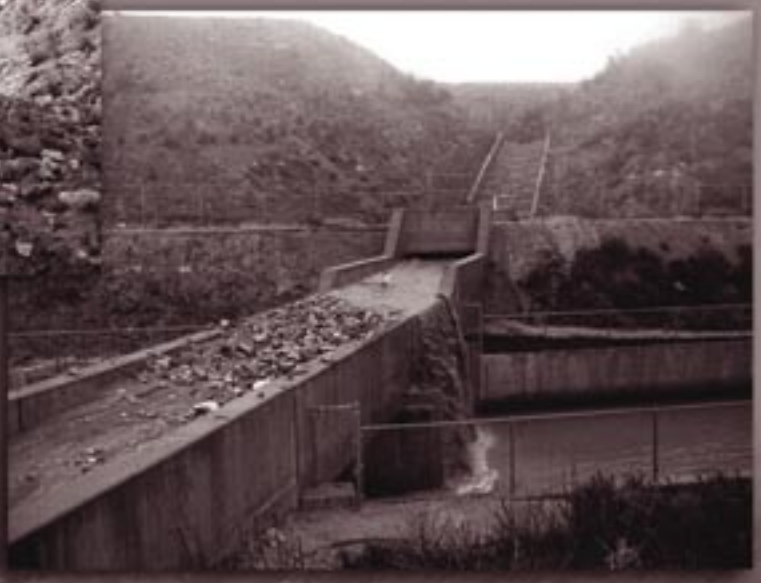
STATE OF CALIFORNIA • DEPARTMENT OF WATER RESOURCES

DWR NEWS | *People*

SUMMER 2005



Southern California Mudslides

Above: *Assistant Utility Craftsworker Superintendent* ***Richard Jones*** *of Southern Field Division inspects the cleanup efforts along the Devil Canyon Powerplant Headworks Access Road.* ***Right:*** *Overchute crossing the Devil Canyon Channel overflows as a result of mudslides in upstream drainage areas.* ***Below:*** *Erosion repairs along the access road to Pyramid Dam that was damaged by Piru Creek.*

South Bay Aqueduct Enlargement
Page 8

Colorado River Basin Drought
Page 15

Lower Yuba River Accord
Page 27

Most of us are familiar with the Department of Water Resources' traditional activities centered on water supply, flood management, Delta protection, and helping local communities meet their water needs.

But we are also providing strong leadership and expertise on many other important initiatives to ensure that California's water and ecosystem restoration needs are met. One of the most significant activities currently underway is our work at the Salton Sea.

The Salton Sea is the largest body of water in California. Located in the southeastern part of the State, the Sea was formed in 1905-1907 by flooding on the Colorado River. Today, the Salton Sea supports an important fishery and is a critical link in the Pacific flyway, providing habitat for hundreds of bird species.

Two years ago, state legislation directed the Resources Agency to undertake restoration of the Salton Sea ecosystem and permanent protection of the fish and wildlife dependent on that ecosystem.

The State was handed this role for several reasons. First, we are a neutral party with respect to the disputes associated with water management issues in the region, including those involving Colorado River water supplies. Second, our involvement initiates a long-term commitment of State financial support. Third, the State is uniquely poised to develop a restoration plan because it is responsible for fish and wildlife protection. Finally, local efforts to develop a plan for the long-term benefit of the Salton Sea have not resulted in a viable project.

Working closely with the Resources Agency and the Department of Fish and Game, DWR will prepare an ecosystem restoration plan that will be submitted to the Legislature by the end of 2006. The legislation specifically directed our attention to several key themes – conservation measures to protect fish and wildlife, minimizing air quality impacts, and improving water quality.

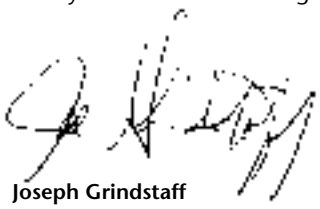
It's a major undertaking. For example, we have identified 27 groups of alternative plans, involving hundreds of options aimed at improving habitat, water elevations, and water quality at the Sea. In addition, we must develop a plan that maintains the Sea for agricultural discharge, considers recreational and economic opportunities, and is reliable and flexible

In order to develop the best solution for the Sea, DWR is engaged in a proactive effort to bring all major stakeholders together. Many of the stakeholders are represented on the Secretary of Resources' Salton Sea Advisory Committee.

But we have significantly expanded our efforts in order to reach further into the community. We want to involve residents, local officials, federal agencies, business, agriculture and recreational interests, environmental organizations and tribal members who live and work in the region. In the first four months of 2005, we held 13 meetings throughout the Salton Sea area. More than 230 people attended our meetings, and we have been able to start a productive dialogue on solutions, challenges and partnerships.

I have been fortunate to attend many of these meetings, and have had an opportunity to talk with hundreds of people about the State's role in the Salton Sea's future. We are not advocating a specific plan or alternative; rather, we want to roll up our sleeves and begin the hard work of bringing the diverse group of stakeholders together to implement a plan that will have lasting benefits to protect this treasured ecosystem.

DWR has long been recognized for its tremendous accomplishments in protecting and managing our State's water resources. I am confident that our work to help restore the Salton Sea ecosystem will ultimately be one more in a long list of great Department legacies.



Joseph Grindstaff
Chief Deputy Director
Department of Water Resources
(Grindstaff is currently serving as acting Director of CALFED.)

DWR NEWS | *People*

SUMMER 2005

DWR NEWS/People is published quarterly by the California Department of Water Resources.

Please send questions, comments, or story ideas to:

DWR NEWS/People
Public Affairs Office
1416 Ninth Street, Room 252-21
Sacramento, CA 94236-0001

Email:
dwrpeople@water.ca.gov

Phone: (916) 653-8743

DWR NEWS/People's Web site is http://www.publicaffairs.water.ca.gov/dwrnewsletter/

FUNDED BY THE STATE WATER PROJECT CONTRACTORS

Printed on recycled paper

TABLE OF CONTENTS

WATER, MUD AND OIL

Trying Times for DWR's Southern Field Division

by Don Strickland

Photos by Southern Field Division Staff

2005 began with the second wettest Southern California rainfall season on record, turning Los Angeles County into a soggy sponge. Then, the saturated ground began to move and a number of homes were destroyed by mudslides. The Governor's Office of Emergency Services reports 38 people lost their lives in January and February from storm-related causes (including traffic crashes and mudslides).

The rain and mudslides also kept DWR's Southern Field Division (SFD) personnel on alert status for weeks on end. There was storm damage throughout the Division, from erosion problems at Piru Creek to mud and debris in the William E. Warne Powerplant fire sump and cooling water system. The volume of water was so great that some of the concrete wall sections at the Castaic Lake spillway failed.

"Throughout the Division, we're looking at more than $6 million in damage repairs," said Southern Field Division Chief **Sebastian Perez**.

"I've been here since 1971 and it was about the worst winter season I've seen," said SFD Water Quality Supervisor **John Kemp**. "Roads were washed out, making it real hard to get out to our monitoring equipment."

Gene Buell, Civil Maintenance Supervisor, inspects flood damage to the Devil Canyon Second Afterbay Wasteway Access Road.

"I've been here since 1971 and it was about the worst winter season I've seen. Roads were washed out, making it real hard to get out to our monitoring equipment."

—SFD Water Quality Supervisor John Kemp

Southern Field Division Civil Maintenance Crews install the absorbent booms around oil spill in Pyramid Lake.

Emergency Repairs on East and West Branches

Kemp and his crews increased their turbidity checks at Castaic and Silverwood lakes during the storms so they could keep water agencies like Metropolitan Water District of Southern California, San Bernardino Municipal, and others, informed. "They like to be kept up-to-date," said Kemp. "Then, they can make changes in their coagulants to enhance water quality."

At the Devil Canyon Powerplant, there was considerable flooding of the areas around the afterbay and the headworks access roads. "Basically, the hillsides, which had been ravaged by last year's fires, washed into our flood control structures," said Water Operations Supervisor **Bonnie Duecker**. "It caused clogging, washouts, and other maintenance problems."

Contractors place absorbent and containment booms around oil spill in Pyramid Lake.

To cope with the unusually heavy rainfall, water was released from reservoirs at the same rate it was flowing in. "Our inundation plan worked exactly as predicted," said Duecker. "What we released combined with other natural runoff and was then handled by the Mojave River Dam, the U.S. Army Corps of Engineers' flood control facility."

There was so much rain, however, that the runoff was unlike anything seen in many years. "Water flowed through Hesperia and all the way to the northwest edge of the Mojave Desert," said Duecker. "There was a lake in Baker, the town on U.S. Highway 15 known for being dry and the hottest summertime spot in the nation."

Vista del Lago Closed Temporarily

Early in March, a mudslide fractured a water line serving the Vista del Lago Visitor Center at Pyramid Lake (60 miles northwest of downtown L.A.) and forced closure of the northbound I-5 on/off ramps. The Visitor Center was also closed while repairs were made to the water line and some electrical connections.

>>> continued on next page

Left: (Left to Right) *Southern Field Division's Utility Craftsworkers crew* ***Mike Hindman, Frank Martinez, Mat Martin,*** *Assistant Superintendent* ***Brian Carter*** *stand by boat that was used to place booms in Pyramid Lake during the oil spill.*

Center: *DWR utility craftworkers placed oil absorbent booms at Pyramid Lake to contain the spill in Posey Cove and limit environmental damage.*

Bottom: *In Devil Canyon's Second Afterbay Wasteway Access Road, the huge culverts plugged with debris and the road washed out.*

Just a few days before the scheduled March 20 reopening, a second slide snapped another section of water line and the reopening was postponed indefinitely.

On March 23, while crews were still working to get Vista del Lago back in operation, a section of hillside above the lake began to slide, rupturing a 14-inch high-pressure pipeline that delivers oil from Bakersfield to L.A. area refineries. About 126,000 gallons of crude flowed into the reservoir that stores water for Los Angeles and several other south state communities.

DWR personnel and hazmat teams responded with heavy equipment on the east side of I-5, creating earthen berms to hold back the oil moving through Posey Canyon.

As a number of federal, State, and county agencies rushed to the scene, DWR Utility Craftsworkers placed oil absorbent booms on the lake, containing the spill in Posey Cove and limiting environmental damage. DWR's Water Quality Section immediately began taking samples and determined that drinking water standards were not being compromised. The California Department of Fish and Game then assumed the

Arrowhead Road, the eastern access to Cedar Springs Dam from Hesperia, was flooded during the January 2005 rains. Note the top of the power poles.

Osito Adit drainage channel damage caused by heavy rain runoff.

role of lead State agency (alongside the U.S. Forest Service and Pacific Pipeline Systems, which owns the damaged oil line).

"Initially, the wind was in our favor," said SFD Operations Superintendent John Bunce. "It helped keep the oil from spreading too fast out into the lake."

Before the cleanup was finished, however, Mother Nature changed her mood – serving up strong winds, rain and cold temperatures that made a nasty job even more difficult. "The conditions tested our skills," said Bunce. "However, our people proved again that they're ready and able to respond to all natural and man-made emergencies."

Angeles National Park officials say total cleanup of the oil spill could take at least a year.

As for Vista del Lago, because of the amount of ground movement in and around the facilities, the center will remain closed pending a study of the foundation stability and a determination of repair options.

[On April 15, 2005, the Federal Emergency Management Agency announced a Presidential major disaster declaration for the counties of Los Angeles, Orange, Riverside and Ventura due to the severe storms, flooding, and mud and debris flows occurring February 16 - 23, 2005. On April 22, FEMA amended the declaration to include Kern, San Bernardino and San Diego counties]

SOUTH BAY AQUEDUCT
Enlargement and Improvement Project

by Anna Torres

Photos by DWR Photography Unit

Above: (Left to Right) *Division of Engineering's* ***Corey Hiratsuka****, Associate Electrical Engineer,* ***Kevin Gray****, Associate Civil Engineer, and* ***Paul Strusinski****, Senior Civil Engineer make a field visit to view required excavation to the north (right side) of existing South Bay Pumping Plant.*

Improving Water Supply Reliability

The South Bay Aqueduct was the first water delivery facility of the California State Water Project. The first phase was completed in 1965. This Aqueduct transports water from the Delta to communities located in Santa Clara and Alameda counties. The South Bay Aqueduct delivers water according to water supply contracts with Alameda County and Santa Clara Valley Water Districts as well as Alameda County Flood Control and Water Conservation District, which is also known as Zone 7. These three Water Districts, known as the South Bay Contractors, are among the 29 State Water Project Contractors. The South Bay Aqueduct, which consists of 1.8 miles of tunnel, 10.8 miles of canal, and 31.8 miles of pipeline, starts at Bethany Reservoir near Tracy and ends in San Jose. With an estimated $81 million for enlargement, $24 million for improvement, and $13 million for off-peak pumping, the total cost of the entire enlargement of the South Bay Aqueduct project is estimated to be about $118 million.

As the population of California's South Bay region grows, there is an increased demand for water. In 2001, the Department of Water Resources' Engineering and Operations and Maintenance divisions began working with South Bay Contractors and the SWP Analysis Office to develop strategies to enlarge the South Bay Aqueduct and ensure adequate supplies of water.

Current Conditions

"The existing South Bay Aqueduct facilities, such as South Bay Pumping Plant and Dyer Canal, Livermore Canal, and Alameda Canal, are not adequate for future water needs," said **Terry Becker**, Program Manager in the Division of Engineering. "The current system has a maximum design capacity of 300 cubic feet per second. However, the system cannot be operated at that capacity without exceeding freeboard requirements for the canals."

Improvements in energy use are also part of the development plan for the Enlargement Project of the South Bay Aqueduct. There is currently a benefit to minimizing the pumping of water during the "on-peak hours." This will reduce the amount of money spent to pump the water for services.

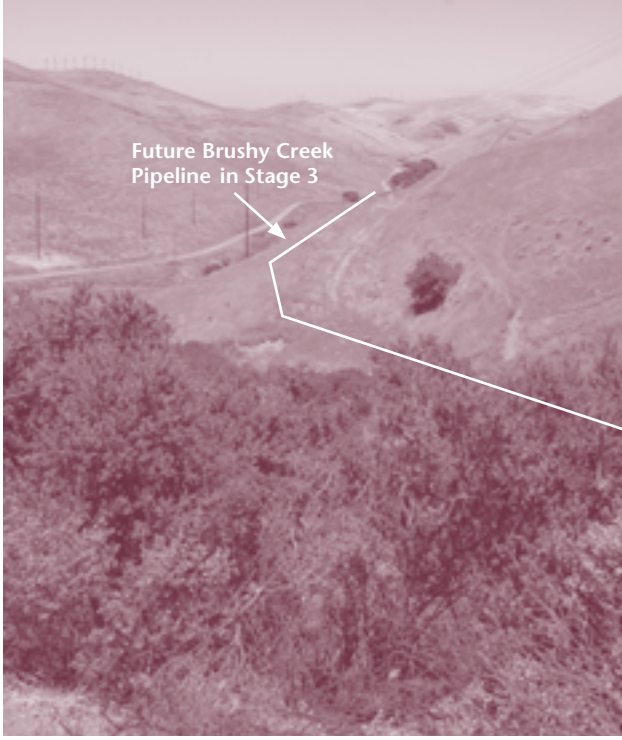
Why the Need to Enlarge the South Bay Aqueduct?

The enlargement project is needed to enhance the facility. Improvements will be made to allow the system to reliably be operated at the design capacity, and to provide a spare pump. The Enlargement features will increase the design capacity from 300 cubic feet per second to 430 cubic feet per second. The increase in pumping capacity and construction of Dyer Reservoir (425 acre-feet capacity) will decrease pumping into the South Bay Aqueduct required during on-peak hours by allowing more pumping during off-peak hours.

The decrease in pumping during on-peak hours will help to lower the pumping cost by using cheaper off-peak energy. It is stated in the "Environmental Impact Report of 2004" for the South Bay Aqueduct Enlargement Project that, "the off-peak pumping alternative is economically feasible due to the relative cost between on and off-peak power and ancillary services." Developing the additional capacity to pump more water during off-peak hours reduces the amount of money required to transport the water through the South Bay Aqueduct.

"There is also a need to rehabilitate structures of the existing South Bay Aqueduct. Since 2001, $25 million has been spent on the South Bay Aqueduct for rehabilitation and reliability upgrades. There are still several structures that have not had major updgrades for almost 40 years," said Terry. "The rehabilitation of those structures will create more reliable facilities which would last longer than the present ones."

"The initial phase of the project, which was to rehabilitate the existing system, was completed in June and December 2004," said **Ron Lee**, Chief of Engineering's Civil Engineering Branch.



Facing north from the Backsurge Pool of the Dyer Canal to the southern end of the Existing Brushy Creek Pipelines Stage 1 and 2 of the South Bay Aqueduct.

The State Water Project Contractors and How They Help

DWR has met continuously with the State Water Project Contractors who will pay for the enlargement project and improvement work. Discussions included the collection of data and observations used for the design and construction of the project. State Water Project Contractors have helped DWR by providing information on the elements that are needed for the South Bay Aqueduct enlargement project. As the Environmental Impact Report states, "Zone 7 will pay for the entire cost of the enlargement. The improvement work will be funded by all three South Bay Water Contractors based on their proportional share of the related capital costs by Repayment Reach. The costs and benefits related to off-peak pumping will be shared by all State Water Project Contractors."

>>> continued on next page

(Left to Right) *During a monthly South Bay Water Contractors meeting at Delta Field Division, some of the participants included* ***Pat Whitlock*** *of Delta Field Division,* ***Don Elmore*** *of Delta Field Division,* ***Dee Dillon*** *of the State Water Contractors,* ***Dave Duval****, Chief of Delta Field Division, and* ***Terry Becker*** *of Engineering.*

(Left to Right) *South Bay Water Contractors of Zone 7* ***Ken Henneman****, Program Manager* ***Jim Horen****, and* ***Richard Putich*** *take notes and listen to updates about the South Bay Aqueduct Enlargement and Improvement Project during a monthly meeting.*

One of the South Bay Water Contractors, Zone 7, has worked with DWR to develop studies of the South Bay Aqueduct's features such as the South Bay Pumping Plant, Patterson Reservoir, and Del Valle Dam which identified that the South Bay Aqueduct was in need of an expansion and that it was unable to sufficiently transport the maximum amount of water to the clients of Zone 7's water district.

Time line and cost for the completion of the South Bay Aqueduct Enlargement Project:

2002 **September 2:** The work on environmental permits and the EIR commenced. In December of 2004, the EIR was certified. The formal consultation began in December of 2004 and is estimated for completion in September of 2005. It is anticipated that all environmental permits will be received by November 2005.

2004 **January 2:** (Right of Way) Acquisition work began. It is scheduled for completion in 2006.

November 22: Furnishing pumps and motors for South Bay Pumping Plant began construction. It is scheduled for completion in 2007.

2005 **April 25:** The furnishing of power transformers for South Bay Pumping Plant. It is scheduled for completion in 2007.

July 29: The furnishing of switchyard equipment for South Bay Pumping Plant. It is scheduled for completion in 2007.

September 16: The furnishing of switchgear for South Bay Pumping Plant. It is scheduled for completion in 2007.

May 23: The furnishing of valves and actuators for South Bay Pumping Plant. It is scheduled for completion in 2007.

October: The construction of Transmission Line for South Bay Pumping Plant. It is scheduled for completion in 2007.

November: The initial contract for South Bay Pumping Plant is scheduled to begin. It is scheduled for completion in 2006.

December: The construction of Discharge Line and BC Pipeline Number 3 of the South Bay Aqueduct is scheduled to begin. It is scheduled for completion April of 2007.

2006 **March:** The construction of Dyer Reservoir is scheduled to begin. It is planned for completion in 2007.

May: The construction of Surge Tank Number 3 will begin. It is scheduled for completion in 2007.

July: Canal modifications of the Aqueduct will begin. It is scheduled for completion in 2008.

The construction on Patterson Reservoir will begin. It is scheduled for completion in 2008.

September: The construction of the Supervisory Control and Data Acquisition System (SCADA) will begin. It is scheduled to end in 2008. This work will be included in the South Bay Pumping Plant completion contract.

The Completion Contract for the South Bay Pumping Plant will begin. It is scheduled for completion in 2008.

Procedures and Agreements

The South Bay Aqueduct Enlargement Study began with the need to determine the flow capacities of the current structures by developing flow studies conducted by the Division of Operations and Maintenance. Also, an evaluation was done to determine how much of an increase in capacity was needed for the South Bay Aqueduct. The Department also conducted studies on water flows and pipelines in order to determine needs for the enlargement Project. As stated before, along with the studies conducted by the Department, Zone 7 studies on the South Bay Aqueduct were conducted to determine how much of an increase in water capacity the South Bay Aqueduct could facilitate.

In order to create estimates and costs, both the Department and Contractors developed agreements on conducted studies. As stated in the South Bay Aqueduct Enlargement and Improvement Study of December 2003, "In June 2001, Zone 7 signed a letter of agreement with the Department which provided funding to study a potential enlargement of the South Bay Aqueduct."

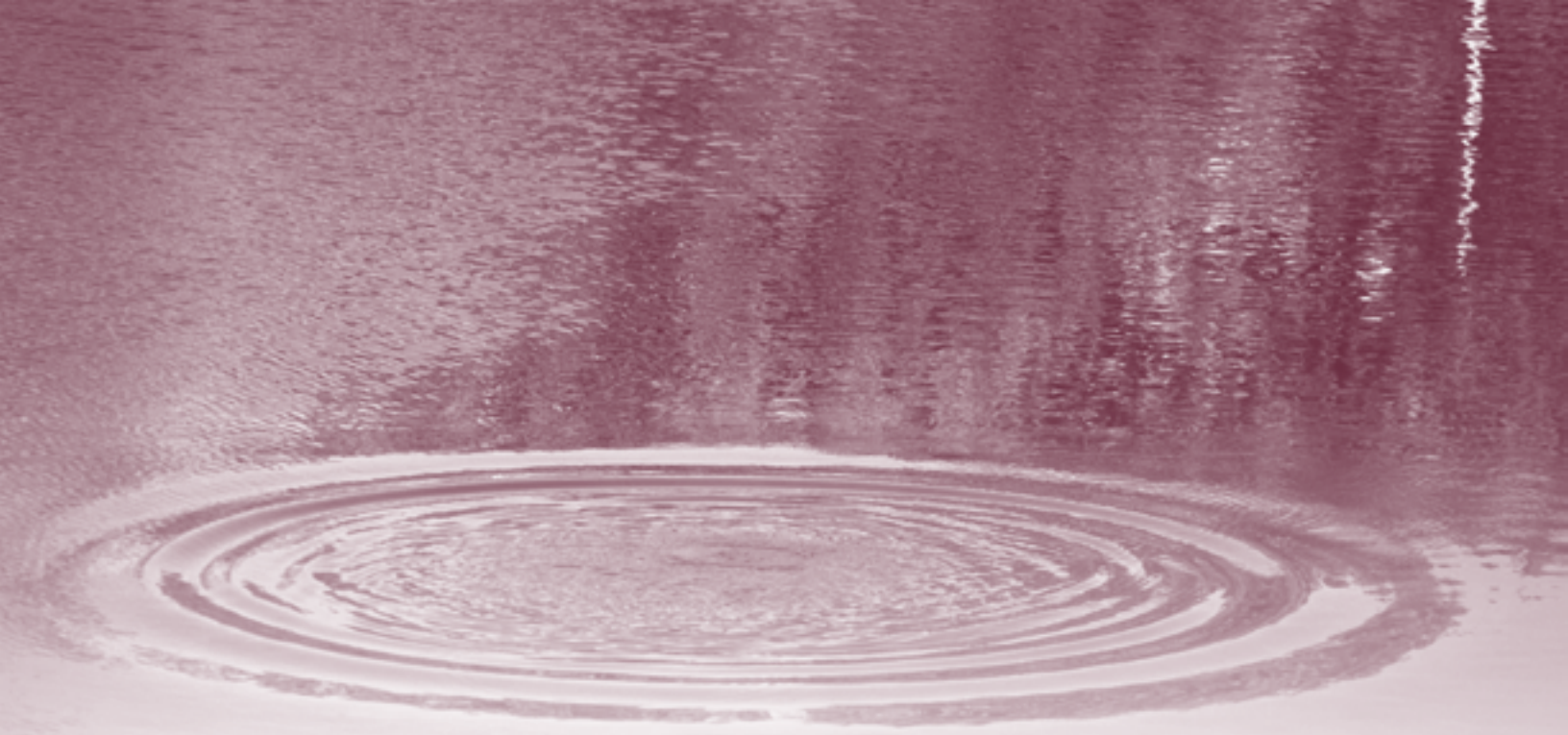
Above: *At a monthly Division of Engineering and Operations and Maintenance meeting on the South Bay Aqueduct Project held in Sacramento, DWR employees included* ***Pat Whitlock, Reza Tajeran, Rick Buckingham, Eugene Williams, William Gow, Khalil Jafarnejad , Soheil Loghmanpour, Tony Carpenter, Terry Becker,*** *and* ***Charlie Kearney.***

Left: Pat Whitlock *of the Delta Field Division with* ***Reza Tajeran*** *of Engineering discuss details of the project.*

Future Expectations of the South Bay Aqueduct

As explained by Terry, the investigations of the South Bay Aqueduct have led the Contractors and Department to develop improvements for the ability to better serve the water needs of the people of California. The future expectations for the South Bay Aqueduct after the completion of the enlargement project in the spring of 2008 are to meet the water needs of the South Bay region for years to come. This will also save the State of California a substantial amount of money as a result of energy conservation.

(Left to Right) Paul Strusinski *and* ***Kevin Gray*** *view the future Dyer Reservoir Site. The area to the left will be inundated with the completion of the reservoir.*



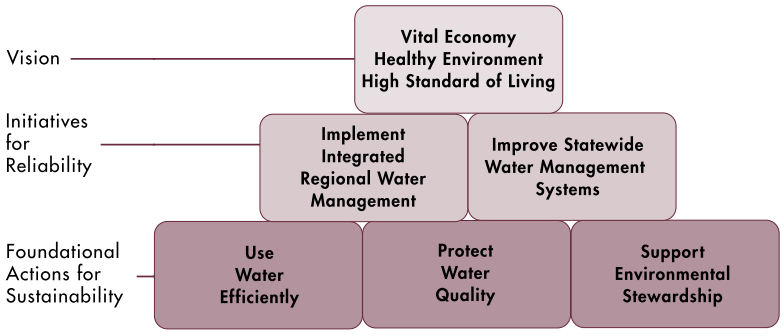
CALIFORNIA WATER PLAN UPDATE 2005
A Framework for Action

by Kamyar Guivetchi

On April 13, the Department of Water Resources (DWR) released the Public Review Draft of Update 2005 of the California Water Plan (Bulletin 160-05). Four and a half years earlier, DWR launched an ambitious effort to prepare this update, involving about 130 DWR employees from a number of divisions and offices, and hundreds of people in an extensive public process.

"It is the product of a collaborative process that brought together the Department of Water Resources, a 65-member advisory committee representing urban, agricultural, and environmental interests, a 350-member extended review forum, and 2,000 interested members of the public. The result is a plan that includes the very best ideas for meeting our water challenges ... that can be used to sustain California's communities, economy, and environment." (Director Lester Snow, ***Water Plan Highlights***, April 7, 2005)

California Water Plan Update 2005 is a roadmap for meeting the State's water demands through the year 2030. It identifies the most pressing water management issues and challenges affecting the State and its regions. It also recommends policies, management strategies, and collaborative approaches that will help balance and guide future investments to make the most of our groundwater and surface water resources. These recommendations are listed at the end of the Water Plan Highlights document and detailed in the Implementation Plan in Volume 1.



Update 2005 provides a "Framework for Action" that reflects today's greater emphasis on regional water management. The plan lays out an initiative for regions to integrate and diversify the strategies they use to manage their water and related

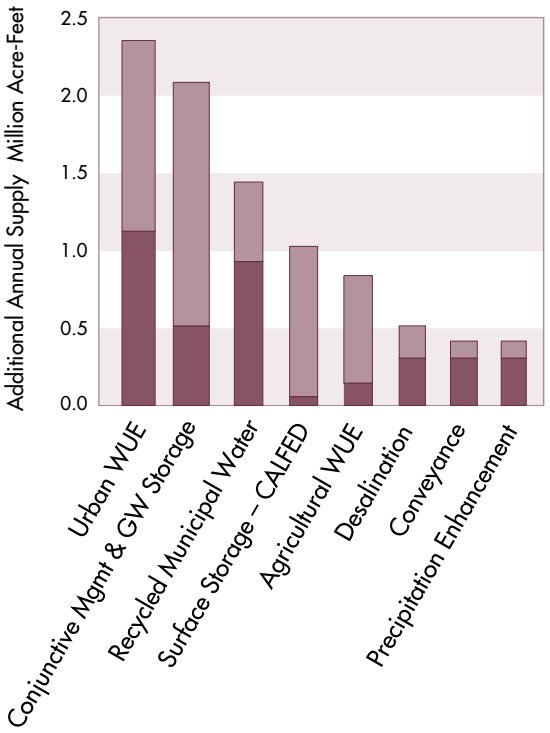
resources. A second initiative focuses on the need to maintain and improve our statewide water management systems, the backbone of California water management. In addition, three foundational actions are described to ensure that our water use is sustainable, namely to use water efficiently, protect water quality, and support environmental stewardship.

> *"This is not just another update of the California Water Plan. It represents a fundamental shift in how people look at water resources management. It recognizes the need for a comprehensive approach in order to succeed and the need to work cooperatively with different entities in managing the state's water resources. It looks at water as a resource whose management involves many responsibilities and raises many issues. It recognizes that there are no silver bullets for managing water."* (Director Lester Snow, Advisory Committee meeting, April 14, 2005)

The Framework for Action also recommends a number of activities that are essential to accomplishing its foundational actions and initiatives. These support activities include State government leadership and oversight, developing funding methods, investing in new water technologies, and ensuring decisions are equitable across all communities.

California Water Plan Update 2005 contains water data, information, and studies used to develop the strategic plan. Update 2005 outlines today's water challenges and evolving water management responses; it presents benefits and costs of 25 management strategies (see table and figure of water benefits); it reports regional water conditions and activities; it considers three future scenarios and their water demands; and it describes an approach to improve data management and analytical tools for future water plan updates. *Update 2005* is presented in five volumes: (1) Strategic Plan, (2) Resource Management Strategies, (3) Regional Reports, (4) Reference Guide, and (5) Technical Guide.

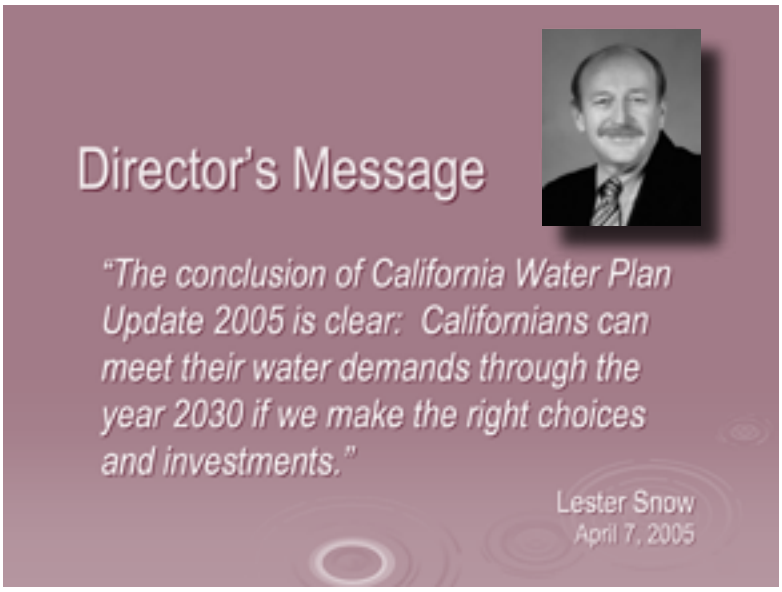
An extensive public review process is underway. In June and July, DWR held 13 public workshops throughout the State, as well as two evening phone-in sessions to receive comments. The final *California Water Plan Update 2005* is expected to be published in fall 2005. The document and more information are available online at **www.waterplan.water.ca.gov**.



Range of Water Supply Benefits

This graph shows the potential range of additional water supply benefits by 2030 of eight strategies to reduce demand and increase supply. Low estimates are shown in the lower (darker) section of each bar. Supply benefits may not be additive among different strategies. Actual benefits will depend on how regions implement mixes of management strategies.

>>> continued on next page



Resource Management Strategies

Reduce Water Demand Agricultural Water Use Efficiency Urban Water Use Efficiency	**Improve Operational Efficiency & Transfers** Conveyance System Reoperation Water Transfers
Improve Water Quality Drinking Water Treatment & Distribution Groundwater/Aquifer Remediation Matching Quality to Use Pollution Prevention Urban Runoff Management	**Increase Water Supply** Conjunctive Management & Groundwater Storage Desalination – Brackish & Seawater Precipitation Enhancement Recycled Municipal Water Surface Storage – CALFED Surface Storage - Regional/Local

Practice Resource Stewardship

Agricultural Lands Stewardship
Economic Incentives (Loans, Grants, and Water Pricing)
Ecosystem Restoration
Floodplain Management
Recharge Areas Protection
Urban Land Use Management
Water-dependent Recreation
Watershed Management

USBR's Glen Canyon Dam on the Colorado River, with Lake Powell in the background. The effects of drought can be seen in the exposed shoreline.

STATUS OF DROUGHT
in the Colorado River Basin

by Jeanine Jones

Photos courtesy of USBR

The Colorado River Basin was already experiencing drought conditions in 2003 when California agencies signed the Colorado River Quantification Settlement Agreement to reduce their use of river water to the State's basic apportionment. Today, the basin has completed five consecutive years of drought, with forecasted runoff for the present year being slightly above average. End of April storage in the basin's two largest reservoirs—Lakes Mead and Powell—was at 62 and 34 percent of capacity, respectively. Total river system storage was at 52 percent of capacity at that time. Various estimates have placed the five prior dry years as being in the top ten consecutive dry years out of a roughly 500-year period of recorded historical and reconstructed hydrology. The single driest year of the recent five-year period was 2002, when estimated natural flow into Lake Powell was 43 percent of average.

The Colorado River is an interstate and international river, traversing parts of seven states—Wyoming, Colorado, Utah, New Mexico, Arizona, Nevada, and California—and the Republic of Mexico. The river basin occupies about 246,000 square miles, covering about one-twelfth the area of the coterminous United States. For management purposes, the river is conventionally divided into an Upper Basin and a Lower Basin at the Lee Ferry gaging station in northeastern Arizona, just downstream from Glen Canyon Dam on Lake Powell. Major Upper Basin tributaries include the Green, Gunnison, and San Juan rivers. Tributaries in the much drier Lower Basin include the Gila, Little Colorado, and Virgin rivers. The U.S. Bureau of Reclamation (USBR) acts as watermaster and operator of the river system on behalf of the Secretary of the Interior, who is charged with these functions by statute.

Basin water supply is strongly dependent on snowmelt runoff in high-elevation portions of the Upper Basin, with about 15 percent of the watershed area producing about 85 percent of the entire basin's average annual runoff. Only about 100 years of usable recorded streamflow measurements exist, as is typical in most western river systems. Researchers have turned to indirect techniques such as dendrochronolgy, the analysis

>>> continued on next page

Natural flow means the quantity of water that would be in a river absent human impacts. Engineers and hydrologists calculate natural flows by quantifying impacts such as diversions, water uses, and the retention of water in reservoirs, adjusting measured river flows accordingly.

Consumptive use means the quantity of water fully depleted, often measured as diversions from a river minus return flows to the river.

Excerpt from 1922 Compact

Articles III (a-d)

(a) There is hereby appropriated from the Colorado River System in perpetuity to the Upper Basin and to the Lower Basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exit.

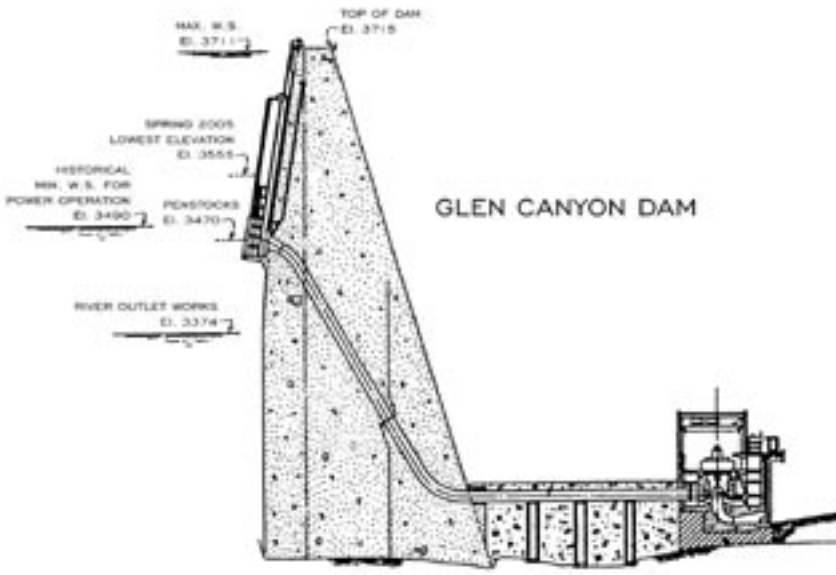
(b) In addition to the apportionment in paragraph (a), the Lower Basin is hereby given the right to increase its beneficial consumptive use of such waters by one million acre feet per annum.

(c) If, as a matter of international comity, the United States of America shall hereinafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River System, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then, the burden of such deficiency shall be equally borne by the Upper Basin and the Lower Basin, and whenever necessary the States of the Upper Division shall deliver at Lee Ferry water to supply one-half of the deficiency so recognized in addition to that provided in paragraph (d).

(d) The States of the Upper Division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding ratification of this compact.

and correlation of tree ring data, to develop a reconstructed streamflow record predating the period of measured data. Although the immediately prior five year dry sequence is among the driest five year period in a reconstructed record going back to the 1500s, there are decades-long periods of sustained low flow in the reconstructed record. University of Arizona researchers, for example, have identified a period with a 20-year natural flow running mean of 10.95 million acre-feet (MAF) (1579-1598), as compared to the lowest 20-year historical natural flow running mean of 12.98 MAF (1953-1972).

It was during a wet period in the measured hydrologic record that the 1922 Colorado River Compact established the basic apportionment of the river between the Upper and Lower Basins. At the time of Compact negotiations, it was thought that an annual flow volume of about 21 MAF was available for apportionment. The Compact provided for 7.5 MAF of consumptive use annually for each of the basins, plus the right for the Lower Basin to additionally develop 1 MAF of

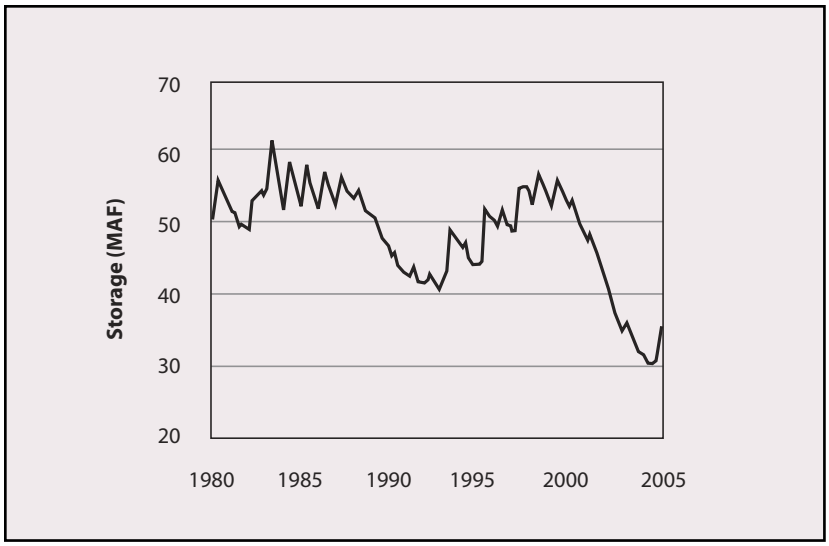


A cross-section of USBR's Glen Canyon Dam on Lake Powell.

Falling lake levels reduced the hydroelectric power generation capacity at Glen Canyon Dam and exposed extensive areas of previously submerged canyons and rock formations along the river channel upstream.

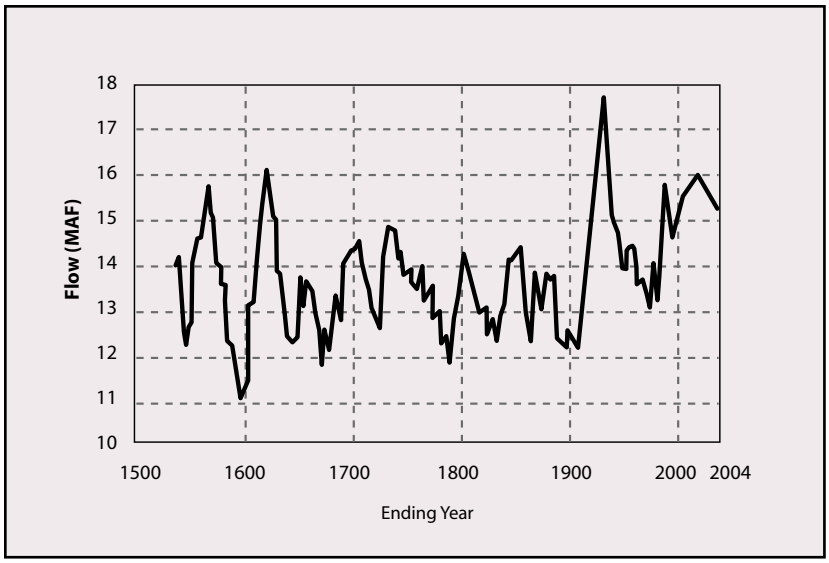
Total Colorado River Basin Storage Since 1980

(following initial filling of Lake Powell, which began in 1963)



Reconstructed and Observed Natural Flow at Lees Ferry

(Seventeen year running average. Source: University of Arizona)



consumptive use annually (see sidebar). Subsequently, a 1944 Treaty with Mexico provided a volume of water of 1.5 MAF annually for Mexico. The more than 60 MAF of storage capacity constructed in the river basin was intended to provide for the large annual fluctuations in the river's flow.

During the period of measured hydrology now available, the river's average natural flow has been about 15 MAF annually. The Lower Basin's growth to full use of its interstate apportionment in the 1990s, combined with drought, has recently focused attention on how the Compact and Mexican Treaty might be administered during times of shortage. There are no extant shortage operations criteria for the reservoir system. USBR is beginning a formal rule-making process to establish such shortage criteria, a process expected to take about two years. Relatedly, the Colorado River Basin States are also holding discussions on cooperative shortage management measures. The Colorado River Board (CRB) of California is the State agency charged with representing the interests of California users of river water; the Department is an ex-officio member of the CRB.

State Water Contractors Profiles—
Castaic Lake Water Agency

by Pete Weisser

The Castaic Lake Water Agency (CLWA) is a public water agency with 25 years of experience in providing water to an area of 195 square miles in Ventura and Los Angeles counties. Established in 1962, CLWA is a water wholesaler to four retail purveyors serving a population of about 200,000. The four retailers served by CLWA are: CLWA Santa Clarita Water Division, Los Angeles County Waterworks District # 36, Newhall County Water District, and Valencia Water Company.

CLWA Administration Building.

CLWA Mission

CLWA's mission statement is: "A Public Agency Providing Reliable, Quality Water at a Reasonable Cost to the Santa Clarita Valley." The CLWA service area comprises the Santa Clarita Valley, an inland valley with typically hot, dry summer and fall seasons. About 80 percent of water use there is municipal and industrial. About 20 percent is for agriculture and other uses. The single greatest use of water is irrigation for residential lawns, gardens, landscapes, parks, schoolyards, and golf courses.

Water Sources

The Valley's current water needs of 80,000 acre-feet per year are met by about 50 percent State Water Project (SWP), provided by CLWA, and about 50 percent local groundwater, depending on hydrologic conditions. CLWA operates two water treatment plants, two pump stations, two storage facilities, and more than 17 miles of transmission pipelines.

SWP deliveries to the Castaic Lake Water Agency began in 1980. CLWA's maximum SWP Table A Amount is 95,200 acre-feet-per year, with actual deliveries to meet existing demand of about 40,000 acre-feet-per year. CLWA draws SWP water from Castaic Lake, with water flowing into two treatment plants: Earl Schmidt Filtration Plant and Rio Vista Water Treatment Plant. After treatment, water enters the distribution systems of the Santa Clarita Valley retail purveyors.

Major regional groundwater sources are the Alluvial Aquifer, providing about 30,000 to 40,000 acre-feet per year, and the deeper Saugus Formation, providing about 7,500 acre-feet in typical water years. These aquifers are naturally replenished by rainfall, local stream flows and the Santa Clara River.

Recent Changes

In April 2005, CLWA initiated a new treatment regimen, switching from the traditional chlorine disinfection to chloramines. The change enables CLWA to meet higher water quality standards of the U.S. Environmental Protection Agency.

CLWA is nearly finished with a major upgrade and modernization of its original treatment plant, the Earl Schmidt Filtration Plant (named after CLWA's first Board president), which was constructed in the late 1970s.

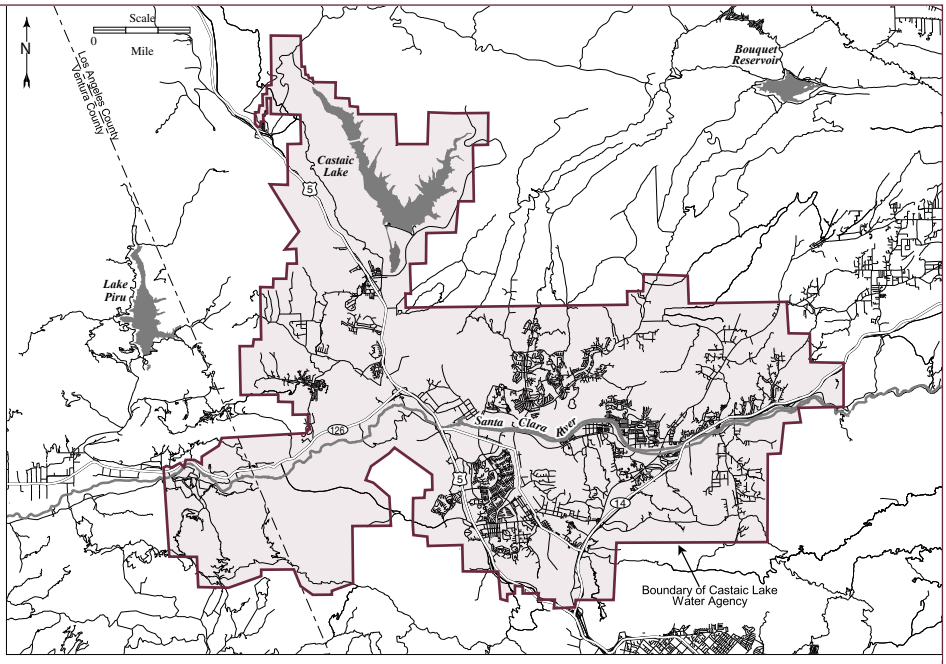
To modernize and upgrade its distribution system to the eastern portion of the Santa Clarita Valley, CLWA currently is constructing the Sand Canyon Pipeline and Reservoir Projects. Launched in Fall 2004, these projects will replace a 14-inch pipeline built in the

CLWA Magic Mountain Pipeline.

1980s. The projects entail construction of a booster pump station, a larger (48-inch diameter) pipeline and an expanded reservoir, improving conveyance of imported water to the eastern portions of the service area.

CLWA Governance

Like other public water agencies, CLWA operations are governed by a Board of Directors. The 11-member governing board is composed of seven elected and four appointed members. The agency has three elective divisions. Two directors are elected from each of the three divisions and one director is elected at large. One director is appointed by each of the four retail water purveyors.



CLWA boundary map.

Dan Masnada, an experienced water professional, has been CLWA's General Manager since April 2002. Previously, he managed the Central Coast Water Authority (CCWA) for almost 10 years.

His CCWA duties included extensive partnership with the Department of Water Resources on SWP issues. In the mid-1990s, Masnada worked with DWR on building the $600 million, 120-mile-long Coastal Branch Phase II Aqueduct and CCWA treatment and conveyance facilities, bringing SWP water to San Luis Obispo and Santa Barbara counties.

"CLWA has progressively met the growing needs of the valley by working with its retail purveyors to ensure the valley's water supply is developed and augmented in a timely manner."

—Dan Masnada,
CLWA General Manager

Funded by local water purchasers, the Coastal Branch project met stringent environment reviews and overcame mountainous terrain challenges to provide about 50,000 acre-feet-per year of SWP water to an arid coastal region. His CCWA experience also included involvement in developing the 1994 Monterey Agreement, an effort to modernize SWP water contracting.

Prior to CCWA service, Masnada was Managing Director of the Valencia Water Company, a subsidiary of The Newhall Land and Farming Company. Serving with Valencia from 1983 to 1992, Masnada was that retail company's first appointed Director on the CLWA Board.

Masnada earned a Bachelor of Science degree from the University of Santa Clara in 1975 and a Master of Science degree at Stanford University in 1976.

Outreach and Conservation

CLWA conducts active public outreach and education programs serving Santa Clarita Valley residents. Featured are adult and student education efforts, and the award-winning Conservatory Garden, as well as celebration of Water Awareness Week each May as part of a statewide water education partnership.

Water conservation is a year-round priority. CLWA is a member of the California Urban Water Conservation Council and is currently assisting retailers with implementation of water conservation Best Management Practices.

Conservation education advice and tips are available on the Agency's Web pages while the Agency's award-winning school education program reaches an estimated 8,000 students annually in area schools.

CLWA Seen as a 'Microcosm' of California Water Trends

The Castaic Lake Water Agency (CLWA) is a microcosm of California's water landscape and water management trends, according to its managers. It serves the Santa Clarita Valley, a

>>> continued on next page

scenic area transformed over the last 25 years from an agricultural valley supported solely by groundwater to a burgeoning home-and-condo Eden, thriving on a balance of imported water and local groundwater.

In 1980, the Santa Clarita Valley was a sleepy ranching and farming region, totally dependent on local aquifers for irrigation. Today, its bustling population is developing at a rate of about 2,000 new housing units annually. In 25 years, the region's water demand has doubled from about 40,000 acre-feet per year (afy) of groundwater to 80,000 afy, half of which is water pumped south from northern California through the California State Water Project (SWP).

CLWA Rio Vista Water Treatment Plant.

To keep pace with its region's thirst, CLWA has a tradition of seeking and obtaining additional imported water—securing 12,700 afy of SWP water rights from Devil's Den Water District in 1989 and then in 1999 securing the largest transfer of Table A Amount water in the history of the SWP, 41,000 afy. This transfer shifted water from the Wheeler Ridge-Maricopa Water Storage District, a Member Unit of the Kern County Water Agency (KCWA), to CLWA. Credit for those acquisitions goes to **Bob Sagehorn**, longtime CLWA General Manager who retired in 2002.

"CLWA has progressively met the growing needs of the valley by working with its retail purveyors to ensure the valley's water supply is developed and augmented in a timely manner," said Masnada, CLWA General Manager.

"We have done this by developing a diversified water portfolio, effectively coordinating water supply planning with the local land use planning entities (i.e. the City of Santa Clarita and Los Angeles County), financing and implementing a comprehensive long-range capital improvement program and being a strong advocate of water conservation through proactive education and retrofit programs."

CLWA Castaic Conduit Re-location.

Along the way, CLWA took a path different from most SWP contractors, who are exclusively water wholesalers, by entering the retail field in 1999. CLWA acquired the Santa Clarita Water Company (doubling the number of CLWA staff overnight with the purchase) which deals directly with end-use customers.

The future holds dramatic promise and challenges for CWLA. The Los Angeles County Board of Supervisors recently approved the 21,000-unit Newhall Ranch Project—to date

the largest single development ever approved in Los Angeles County. It will be built within CLWA's service area and served by of one of Castaic Lake's four retail purveyors, Valencia Water Company.

Not surprisingly, CLWA is searching for more water to meet the needs of a rapidly growing community. It is also pursuing water banking programs to enhance the reliability of its existing Table A Amount.

In addition, CLWA is in the embryonic stages of developing a recycled water distribution system that will provide about 17,000 afy of water for non-potable purposes, such as landscape irrigation. Initial deliveries from the system commenced in 2003.

CLWA's moves to acquire added water supply and to firm up the reliability of its existing supply have stirred some criticism and opposition, chiefly among critics of urban growth in the region. As a result, Masnada refers to his agency as "a lightning rod for litigation and controversy, an unfortunate byproduct of our success."

CLWA Castaic Conduit Relocation.

Golf course water hazard that serves as CLWA recycled water pond.

Jim Beck, Kern County Water Agency's New General Manager

Jim Beck became General Manager of the Kern County Water Agency (KCWA) in January of 2005.

"My goal is to increase our water supply and improve reliability for Kern County Water Agency," said Beck.

As General Manager, Beck oversees the operation and administration of KCWA, which has broad water supply management responsibilities within Kern County and he has been instrumental in many programs that have placed the KCWA at the forefront of water management statewide. This includes coordinating local participation in the State Water Project, developing and operating groundwater banking programs, and operation of the Cross Valley Canal.

In his 20 years with KCWA, Beck has held a variety of positions. Previously, he was manager of Improvement District 4, KCWA's urban water district that provides a supplemental water supply for the metropolitan Bakersfield area. He was the manager on the expansion of the water treatment facility for KCWA's Improvement District Number 4 and the protection of ground water quality.

Beck also participated in the acquisition of Lower River water rights on the Kern River, which resulted in securing a local water supply for Kern County residents.

Beck has a Masters Degree from the University of Pittsburgh Graduate School of Public Health. He also has a bachelor's degree in Biology and History from the University of Pittsburgh. Beck is a licensed water treatment operator, certified water distribution operator, and water quality analyst.

"My interest in the water field began as I grew up in Western Pennsylvania and spent most of my youth playing in streams," said Beck. "I thought it would be fun to have a career that involved water."

Jim and his wife, Diane have been married for over 23 years and they have two sons; Chandler and Braden.

Desert Water Agency's New General Manager, Dave Luker

Dave Luker became General Manager-Chief Engineer of Desert Water Agency on October 1, 2004. He previously served as the Agency's Assistant General Manager since 1996.

"In addition to expanding the Agency's wastewater role, my goals for the Agency also include continued acquisition and delivery of imported water supplies to meet the needs of the Coachella Valley," said Luker.

Luker is the Agency's fifth General Manager since it was formed in 1961. Desert Water Agency's service area covers 325 square miles including the cities of Palm Springs, Desert Hot Springs, a portion of Cathedral City, and unincorporated areas of Riverside County.

Before joining Desert Water Agency in 1993, Luker was a Vice President at Krieger & Stewart, the Riverside-based civil and environmental consulting firm, serving public agency clients throughout California and specializing in water rights and the design and construction engineering of water and wastewater conveyance, storage, treatment and pumping facilities as well as hydroelectric power plants.

"Some of my memorable projects with Desert Water Agency include working on the Recycled Water System expansion, ongoing Well Pumping Plant construction, Mission Creek Replenishment Project, Hydro-Electrical and Solar Generating Facilities, and Operations Center Expansion," said Luker.

Luker is a registered California Civil Engineer, a registered Professional Engineer in Oklahoma, a Licensed California Land Surveyor, and is certified in health and safety for hazardous waste workers.

He is a member of the Association of California Water Agencies (ACWA), the National Society of Professional Engineers, the American Society of Civil Engineers, the American Water Works Association, and the California Land Surveyors Association.

Luker and his wife, Pam, are the parents of three daughters.

Steve Robbins, Coachella Valley Water District's General Manager

When **Steve Robbins** assumed the helm of the Coachella Valley Water District as General Manager-Chief Engineer in December 2002, calm seas were nowhere to be found.

"They talk about people facing a trial by fire," recalled Robbins. "In my case it was trial by perfect storm."

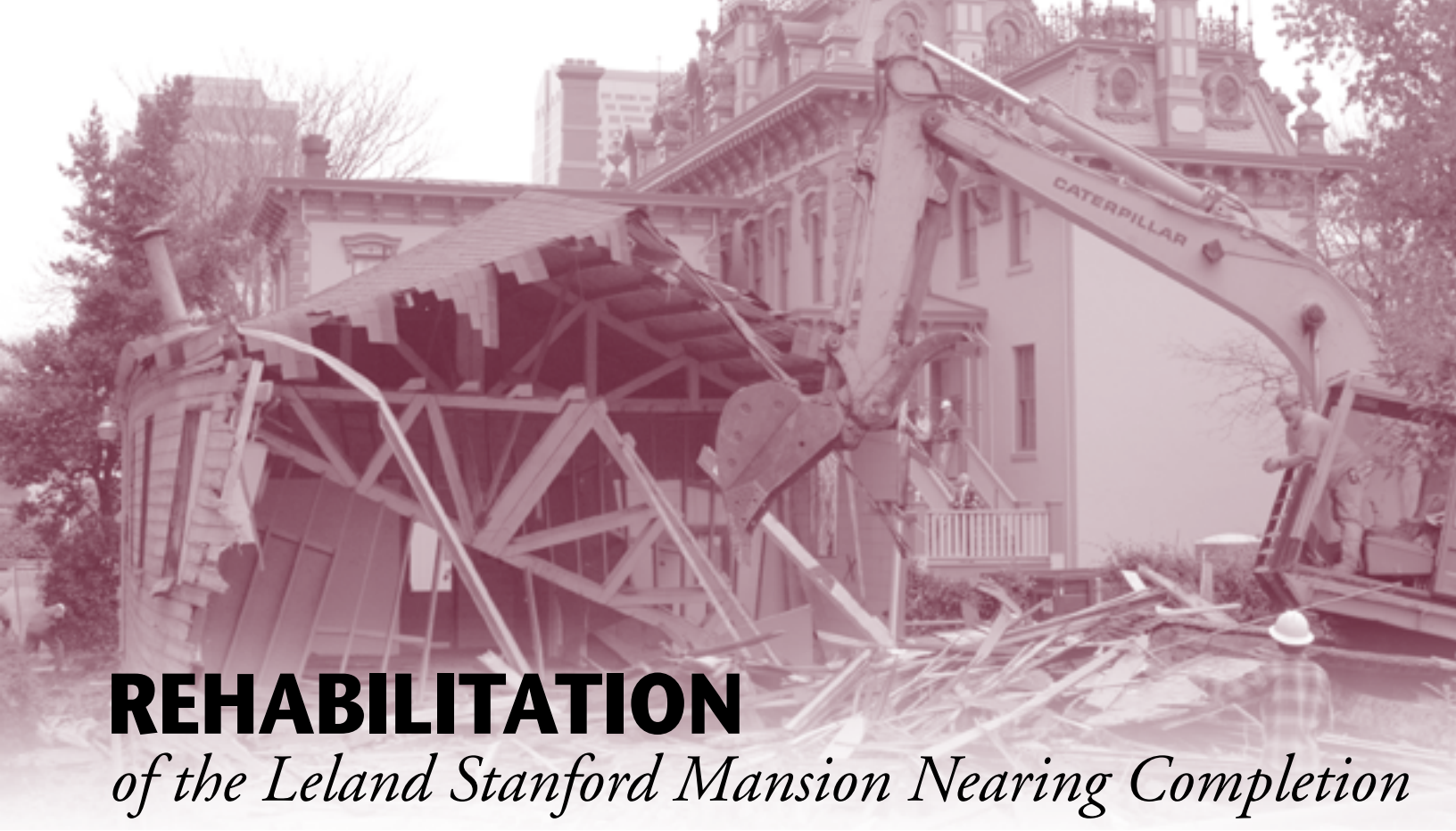
Before becoming General Manager-Chief Engineer, Robbins, a Licensed Civil Engineer, served as Assistant Director of Engineering for six years, Assistant to the General Manager for more than one year, and Assistant General Manager for one year. His CVWD career began in 1983 as a Domestic Water Engineer. After receiving his Bachelor of Science in Civil Engineering in 1976, Robbins went into private business for nearly 10 years.

In 2002, the CVWD was among agencies facing a crucial deadline with respect to efforts to find a solution to California's surplus use of Colorado River water. The Quantification Settlement Agreement (QSA) had to be approved by year end, or the federal government was going to suspend the State's access to surplus water. This could mean that water orders for 2003, including CVWD's, could be reduced. CVWD believed that, the QSA as proposed by others, was not perceived by the CVWD to be in its best interest. After consulting with his board and legal counsel, Robbins made a tough call: CVWD was not going to approve the QSA as proposed. It was his first day as General Manager-Chief Engineer.

Within months, CVWD's Colorado River water order was cut 31 percent and it would be months before the QSA was approved, but if he had it to do all over again, Robbins says he would make the same decision. "It was the right call," Robbins reflected. "We weathered the storm and while there isn't any smooth sailing with respect to water in California, we certainly are on calmer seas now than before."

Since then, CVWD has moved quickly to ensure reliable sources of water. Under Robbins' administrative leadership, CVWD now is the fourth largest holder of State Water Project water entitlements, has implemented a 35-year Water Management Plan for the Coachella Valley, has sponsored agricultural conservation practices that saved nearly 20,000 acre-feet of water in 2004 and is aggressively pursuing similar programs for golf courses and domestic consumers.

"These are very exciting times," said Robbins. "I can't think of a better place to be."



REHABILITATION
of the Leland Stanford Mansion Nearing Completion

by Annie Parker

Photos by DWR Photography Unit and Information Services Branch

Above: *State Parks' Historic Sites office was demolished to allow space for new visitor center and museum to open in September.*

Overshadowed by the Resources Agency building and located among a sea of State and federal buildings in downtown Sacramento is the historic Leland Stanford Mansion. Built in the 1850s, it served three California governors as headquarters until it became a 20th Century haven for children of California with nowhere else to go.

Since 1999, the Stanford Mansion has been the site of a massive rehabilitation effort that has involved million of dollars and myriad private and public interests, and all the work is about to pay off. The Department of Parks and Recreation (DPR) plans to unveil the newly rehabilitated Leland Stanford Mansion State Historical Park to California and the world in September.

According to DPR, the rehabilitation of the Stanford Mansion has two purposes. The mansion will serve California as both the State's diplomatic and business reception center and as an elegant house museum, which will be open for tours. The Mansion will also educate students and other visitors who come to experience the life and times of a 19th century family that helped shape the State we know today.

The Affairs of State

The Stanford Mansion was built in 1856 for prominent Sacramento businessman Sheldon Fogus. Leland Stanford bought the house in 1861 for $8,000 (about $156,000 today). The Stanford Mansion was designed by Architect Seth Babson, who also designed the Edwin B. Crocker home and the Crocker Art Museum.

Stanford was already a successful businessman when he was elected the first Republican Governor of California in 1861. Once elected, Stanford added a semi detached wing to his home to serve as the Governor's Office. He added two additional floors in 1871, enlarging the Stanford Mansion to 19,000 square feet, with four stories and 44 rooms.

>>> continued on next page

(Left to Right) *Stanford Home Guides include* ***Don Falloon, Becky Heilman, Curtis Brock,*** *and* ***Anna Lira****.*

"Stanford wanted to enlarge the home to be more in line with the family's political and social stature to make the Mansion a grander locale," said **Don Falloon**, Guide I with the DPR.

After Stanford left office, the State rented the rooms of the Mansion. During the construction of the Capitol, Governors Fredrick Low and Henry Haight ran the business of the State from the Mansion.

Improving California

When Stanford returned to the private sector, he moved his wife, Jane, and their only son, Leland Stanford Jr. to San Francisco. The Stanford Mansion was loaned to the State for official business. The Stanfords spent time there only while passing through Sacramento. The Stanfords spent much of their time on their farm in Palo Alto and frequent trips to Europe to enrich their son's education.

After the tragic death of Stanford's son at the age of 15, Stanford donated the land that he has purchased in Palo Alto to be the site of a university named after his son. The former Governor died in 1893.

The Leland Stanford Home for Children

In 1900, in another act of charity, Leland Stanford's widow, Jane Lathrop Stanford, donated the Leland Stanford Mansion, where Leland Jr. was born, in trust to the Roman Catholic Bishop of Sacramento to be used as an orphanage to benefit "the friendless children of California." She also included railroad stock to pay for the upkeep of the mansion.

"Stanford Home has a wonderful history and has evolved over time into a State leader in innovative services to youth and families at risk,"

—Erik Sternad, Executive Director of the Stanford Home for Children

In 1906, the Sisters of Mercy began operating the home and did so for over 30 years. The Sisters of Social Services took over for the next 60 years.

"Stanford Home has a wonderful history and has evolved over time into a State leader in innovative services to youth and families at risk," said **Erik Sternad**, Executive Director of the Stanford Home for Children.

In the 1930s, the orphanage shifted to a new residence in the country on Franklin Boulevard, but the area was deemed unsuitable for the older teenaged girls. These girls returned to the Stanford Home. The mansion's official name became the Stanford and Lathrop Home, and it began to broaden its services. The sisters took girls that were considered "trouble" at home, along with those with no family. Some girls came from outlying areas to board in the home to be closer to a city education.

The renovated Stanford Home will open for tours.

In the 1960s, although only girls continued to live in the mansion, the Sisters of Social Services also began focusing on "troubled youth" in outlying areas, and they opened a center for boys as well. In 1979, the State bought the Mansion in anticipation of making it a museum. Consequently, the children's programs and services were relocated in the mid 1980s.

This and other black and white vintage photos were used to determine original interior design and patterns.

Although the Stanford Home is no longer centralized as it was before, the Stanford Home for Children Foundation is still providing services to the people of California, continuing the legacy that the Stanfords wished to create.

Construction Begins

The State Parks Commission had already approved the General Plan in 1989 to rehabilitate the mansion, but it wasn't until 1991 that the newly-created Leland Stanford Mansion Foundation was able to raise private funds to help finance the rehabilitation. Key public funds for the project were made available via Proposition 40, a Bond Act passed in 2002.

The bathtub in the master room of the Mansion went through restoration.

Rehabilitation of the Stanford Mansion was done in three main stages. The first phase was roof rehabilitation, starting in September of 1999. It cost $2 million. Phase Two, the main rehabilitation of the interior of the structure, began in June of 2002. It cost of $8.2 million. Phase Three, the ground construction, is currently being completed. It began in January of 2005 and will cost $1.8 million.

"One of the more difficult aspects of the Leland Stanford rehabilitation project was adhering to the difference between a restoration and a rehabilitation."

—Maria Baranowski, Senior Architect with the Department of Parks and Recreation and Project Manager for the Leland Stanford Mansion Rehabilitation

"One of the more difficult aspects of the Leland Stanford rehabilitation project was adhering to the difference between a restoration and a rehabilitation. A restoration means that everything would be restored as if Leland Stanford was still living there. Rehabilitation means that the mansion will have to have an adaptive use and many things had to be brought up to date. We were able to merge new technology with historic fabric quite successfully," said **Maria Baranowski,** Senior Architect with the DPR and Project Manager for the Leland Stanford Mansion Rehabilitation

While some rooms were restored exactly as they would have appeared in Stanford's time, the areas where the Governor, his staff, and the Stanford mansion staff will be located have been updated with the latest in modern technology.

"Although we certainly cannot predict how each administration chooses to use the mansion, the technological need of this and future administrations will be met," said **Alan Friedman**, Chief Information Officer of the DPR.

Fiber optics and sophisticated communication systems have been installed. Mansion employees, the Governor's staff, and the Governor will be able to access a Wi-Fi network with multiple access points and levels of security customized for the user. A teleconferencing room has been built on the third floor, which will also provide office space for the Governor's staff. The Governor's office will be located in the original Governor's office built by Stanford. Mansion staff will be located on the fourth floor.

"The kitchens had to be completely modernized to accommodate catering kitchens for the Governor's dinner parties, but they didn't want to completely destroy the old walls

>>> continued on next page

of the original kitchens. The solution was to build a room within a room," said Baranowski.

Original Fabrics Used

"We sat down as a group to figure out just how much of the building we needed to change to accommodate the modern upgrades, yet still use the original fabrics of the house. I feel that we were very successful," said Baranowski.

Every contractor and subcontractor selected for the mansion project had to show experience and demonstrate knowledge of historical restorations. The main architects were Page & Turnbull of San Francisco, and the general contactors were Reyman Brothers Construction Company from Nevada.

The 1870s black and white vintage photographs taken by photograher Eadweard Muybridge of the Mansion's interior were used to determine original interior design and patterns. The rehabilitation team recreated the Victorian era colors as closely as possible. They performed "paint-cratering," a technique of stripping layers of paint away to determine original wall color. Carpet colors were selected by using the wall color as a guide and referring to historical color palettes to help fill in the blanks. The carpet was woven on the same type of machine that would have been used in the 1800s.

Display boards with vintage photos, carpet color, and paint color were used throughout the Stanford Home's rooms to help in the renovation process.

*Stanford Home Guide **Don Falloon** explains the detail of renovation to the ceilings.*

The Adaptive Museum

According to **Wendy Franklin**, Chief Curator for the Leland Stanford Mansion State Historical Park, the plan is to give several public tours a day.

An orientation building is being built near the loading dock of the Resources Building to provide interactive exhibits, a film, and a small bookstore. It will also be the place to get tickets for the Mansion tour.

Although the Governor's working areas of the Mansion and the entire fourth floor will not be included on the tour, a slightly different tour route may have to be used when the Governor is in the mansion, but according to Franklin, both needs can be accommodated.

"It's a big mansion. We'll be easily able to route people around certain rooms if needed, and there's always the gardens as another place for them to go," said Franklin.

OPENING OF STANFORD HOME

As part of "Eureka: Admission Day Weekend," the Stanford Home will open with FREE admission on September 9, 10, and 11, 2005. All State Museums and historic Parks in the Sacramento (Capital District) area are also providing free admission from September 9 to 11.

If any DWR employee would like to volunteer for this event they can contact Jill of Parks and Recreation at (916) 445-7373.

Lower Yuba River Accord

On April 21 on the bank of the lower Yuba River near Marysville, the Lower Yuba River Accord was signed to resolve nearly 15 years of controversy and litigation over instream flow requirements for the lower Yuba River. The Accord is based on three proposed agreements, a Fisheries Agreement, a Water Purchase Agreement, and Conjunctive Use Agreements.

The significant environmental and economic benefits of these agreements include new instream flow requirements that will increase protection for the river's fisheries resources, represent the first long-term water acquisition by the State for the CALFED Environmental Water Account, and will improve water supply reliability for DWR, the Bureau of Reclamation, and Yuba County farmers.

Speaking to representatives from the South Yuba River Citizens League, the Browns Valley Irrigation District, Brophy Water District, and Ramirez Water District, Yuba County Water Agency's General Manager Curt Aikens provided a presentation about the history of the accord and the next step for the Board of Directors.

*Director of Fish and Game **Ryan Broddrick** spoke during the Lower Yuba River Accord ceremony.*

Other speakers included **Michael Funk** of the South Yuba River Citizens League, Director **Ryan Broddrick** of Fish and Game, and former Director **Janet Cohen** of South Yuba River Citizens League, who presented a framed photo of the river to **Chuck Boham** of Trout Unlimited.

Deputy Director **Jerry Johns** represented DWR and answered questions from the public.

Mary Ann Parker elected to Law Librarian Board

Mary Ann Parker, Senior Law Librarian in the Office of the Chief Council, has been elected to the six-member Executive Board of the Northern California Association of Law Libraries (NOCALL) for the term of one year.

Mary Ann manages the DWR law library. Her duties include cataloging new books, answering reference questions from the public, conducting special research projects for attorneys, and overseeing law students who work as DWR interns.

Mary Ann's duties as a board member will include helping to formulate policy for NOCALL. She was a charter member when NOCALL was formed in 1983, and has been a member through the 16 years she has worked for DWR. Mary Ann has worked for the State for 20 years, and in law libraries for 25 years.

"NOCALL has been a good source of information and professional development for me and DWR, and I am happy to return the favor," said Mary Ann about her recent election.

NOCALL is a professional association of approximately 450 law librarians who work in law schools, law firms, courts and city, county, State, and federal government agencies in Northern California.

*(Left to Right) During the swearing in ceremony in San Francisco, the six-member Executive Board and former president of the Northern California Association of Law Libraries included former President **Tina Dumas** of Nixon and Peabody, **Prano Amjadi** of Santa Clara University Law Library, **Mary Ann Parker** of DWR's Office of the Chief Counsel, **Donna Purvis** of Morrison and Foerster, Holly Riccio of O'Melveny & Myers, **Julie Horst** of UC Hastings School of Law Library, and incoming President **Pam Rino** of Wilson and Sonsini.*

DWR Employees Celebrate Persian New Year

By Cheryl Henderson and Virginia Sajac

On March 16, DWR employees of Iranian heritage organized and hosted a gala honoring Now rouz, or Persian New Year. They celebrated this 2,500-year-old event with music, pastries, slides of Iran, tapestries, a gold samovar, flowers, and jeweled eggs. About 200 people enjoyed the transformed ambience of Room 1603 in the Resources Building.

*(Left to Right) Persian New Year participants included **Marjaneh Zokaie** of Engineering, **Fariba Khoie** of Engineering, **Fariba Shahmirzadi** of Management Services, **Shahram Ahi** of SWP Analysis Office, **Banafsheh Behnam** of Operations and Maintenance, **Haydeh Hakim-Edrissi** of the SWP Analysis Office, **Reza Zamanian** of SWP Analysis Office, **Mike Torabian** of SWP Analysis Office, **Saeid Raoufi** of Operations and Maintenance, and **Parviz Nader** of the Bay-Delta Office.*

Flowers adorned a table with braided gold-and-silver brocade and covered by satin table linens. The centerpiece displayed items representing seven angelic heralds of life: Rebirth, represented by a basket of eggs and sprouts; Health, by garlic; Love, by lotus fruit; Prosperity, by gold coins; Purity and Cleansing, by vinegar; Beauty of Sunrise, by berries; Light and Hope, by candles; and Growth and Patience by sweet sprouted wheat pudding.

A crystal fish-shaped tank contained goldfish; the onset of Now rouz began when fish stopped moving, a reminder that Now rouz is calculated by one rotation of the earth around the sun.

Now rouz encourages cultural integration and gives people a rare glimpse into customs of the Middle East. Traditions of spring cleaning, feasts, gift exchanges, family visits, and cleansing bonfires continue today.

Haydeh Hakim-Edrissi of the State Water Project Analysis Office has coordinated DWR's Now rouz celebration in recent years.

DWR Wins SIOC Awards

On May 19, DWR's Public Affairs Office (PAO) received four 2004 State Information Officers' Council Awards at an awards ceremony in Sacramento.

The winning projects received a Silver Award for "Albert & Einstein Water Safety Stickers" by **John Carter**, Graphic Designer III in PAO's Graphic Services Branch; a Silver Award for "DWR NEWS/People Winter 2004 newsletter" by **Margarita Macias**, Information Officer and **Annie Parker,** Editorial Technician in the Public Affairs Office; and a Gold Award for "Distance Learning with California State Parks" by **Albert Madrid**, Television Specialist with PAO's Graphic Services Branch, and a Gold Award for "Disability Awareness Banner" by **Jennifer Highhill**, Volunteer in PAO's Graphic Services Branch.

This year's SIOC awards competition drew more than 100 entries in 12 main categories such as audio-visual production, Internet and graphic design, writing, media relations and publications. Award winners are chosen by an independent panel of judges.

March of Dimes WalkAmerica 2005

Now in its 35th year, WalkAmerica is the first and best known walk event in the nation.

History

In 1938, **President Franklin D. Roosevelt** established the National Foundation for Infantile Paralysis, which included volunteers and scientists working to conquer polio. "March of Dimes" became the official name of the foundation after a fundraiser in which the public was asked to send dimes to the President. In 1970, the First WalkAmerica events took place in San Antonio, Texas and Columbus, Ohio.

As the March of Dimes biggest fundraiser, WalkAmerica proceeds support the March of Dimes' mission of preventing birth defects and infant mortality through research, education, community services and advocacy.

"During this third year of the five-year $75 million March of Dimes Prematurity Campaign, DWR was again successful in raising awareness to a problem that would have otherwise gone unnoticed," said **Jimmy Yang**, DWR's Team Captain for the 2005 March of Dimes WalkAmerica Campaign. "With nearly half a million babies in the United States born prematurely, fundraisers such as WalkAmerica are essential to many."

Largest Contributors

Through the 25 DWR employees participating in the 6.2-mile walk-a-thon on April 30, DWR raised approximately $8,900 for the 2005 March of Dimes WalkAmerica campaign. With $1,127, the California Energy Resources Scheduling (CERS) Division was the 2005 top contributing DWR division. Division of Planning and Local Assistance's Central District followed closely as the second largest contributor. The highest individual employee contributor was **Kathryn Murray** with $1,835.

In addition to participating in WalkAmerica, special fundraisers such as book sales, bean bag baby sales, and breakfast burrito sales helped raise money for the campaign.

Pie-In-The-Face Fundraiser

The CERS Division hosted a Pie-in-the-Face fundraiser on April 6 at the Joint Operations Center in Sacramento. The event, which was planned by CERS' March of Dimes representatives **Liz Joiner** and **Debbie Jo Terzoli** along with other DWR staff, raised almost $600.

Pie-in-the-Face participants included Deputy Director **Pete Garris**, Flood Management Chief **Les Harder, Carl Torgersen** and **Coe Hall**, both from Operations and Maintenance. CERS staff participating included **Veronica Hicks, Harman Sufi, George Baldini, Bruce Yonehiro, Reza Molavi,** and **Debbie Jo Terzoli**.

*The 2005 WalkAmerica DWR participants included Left to Right (Front Row): **Evan Norris** (standing), **Henry Norris, Amy Norris** holding **Charlotte Norris, Melissa McKeand, Y Nhi Eznler, Rebecca Barron, Gina Goff, Alyssa Maciejewski** holding **Noveli, Kim Robinson** and dog **Rowdy.** (Second Row): **Kathryn Murray, Kamika McGill, Michele Hughes, Olivia Guebara, Julie Hoang, Floyd Brooks, Ruth Gali, Cindy Percival, Dorothy Benjamin.** (Third Row): **Kristie Joyce, Gwyn Raymer, Lynne Hermosillo, Nic George, Denise Goodman.** (Fourth Row): **Haleigh Yang, Jimmy Yang, Bill Pennington, Tess Pennington.** (Not in Photo: **Liz Joiner** and **Sushil Arora**.)*

"CERS also gives special thanks to the generous product donations and discounts from "Home Depot," "Raley's," and "Crystal Milk," said Debbie Jo. "We also thank **Michael and Liz Joiner** for building and painting the pie throwing booth."

"This year's campaign was again successful thanks to all the Division representatives, volunteers, and walkers for their support and hard work," said Jimmy. "Additionally, I would like to thank all the DWR employees who generously sponsored the walkers and supported in all the fundraising activities."

***Left:** CERS Deputy Director **Pete Garris** was covered with whipped cream all over his face during the Pie-in-the-Face fundraiser.*

***Below: (Left to Right)** Other DWR participants at the Fundraiser included **Cliff Winston**, S**ue Haight, Veronica Hicks** covered with whip cream, and **Paul Farris**.*

Making It a Better Place for Others

By Amanda Fulkerson

As a member of DWR's Disability Advisory Committee (DAC) since 1999, **Nate Wales** is striving to make DWR's working environment a better place for all disabled employees.

"The division I was in when I was a student and first appointed by my supervisor to the DAC was the Office of State Water Project Planning (now the Bay-Delta Office). After graduation in 2001, I started full-time work as an engineer for DPLA."

"DAC works to find and implement solutions to several situations, such as how disabled employees and visitors should be treated during an evacuation and how we can make the procedure more effective," said Nate. "The division I was in when I was a student and first appointed by my supervisor to the DAC was the Office of State Water Project Planning (now the Bay-Delta Office). After graduation in 2001, I started full-time work as an engineer for DPLA."

Nate is also President of the Greater Sacramento Area Chapter of the National Federation of the Blind (NFB). His NFB participation began as a Student at UC Davis when he won two scholarships through the organization. He now serves on the selection committee that awards those same scholarships and takes it upon himself to mentor the winners.

Through his chapter of NFB, Nate along with other participants were responsible for adding brail labels to audio and video rentals at the Sacramento Public Library, lobbying local government on disability issues, and providing feedback to the National headquarters.

When asked if he considers himself an inspiration to people with disabilities, Nate gives a humble response. "I don't think of myself as amazing or inspiring, I'm a person with certain characteristics and one of them is that I happen to be blind," said Nate. "If any disabled person would have the kind of opportunities that I was fortunate enough to have, then their blindness can be just another characteristic. You can do anything you are good at when given good training."

Nate, the son of an environmental engineer, graduated from UC Davis in 2001 with a degree in Civil and Environmental Engineering. While at UC Davis, Nate enjoyed participating in the annual "concrete canoe" project, which included working with a team to build a working canoe out of concrete that actually floats.

***Nate Wales** takes notes during a Disability Advisory Committee meeting.*

To prepare for college, Nate attended a "residential adjustment to blindness program" in Louisiana, where he came to appreciate real Cajun cooking. The program taught Nate how to read brail and honed his computer skills.

During his college years, Nate began his DWR career as a Student Assistant in the Office of State Water Project Planning (now known as the Bay-Delta Office) in 1999. Now, as an Engineer with Surface Storage Investigations Branch, Nate drafts reports on watersheds and reservoirs.

His first DWR assignment was a reconnaissance report for a possible reservoir for an upper San Joaquin watershed. He also spent time drafting environmental documents and conducting bill analyses.

In addition to continuing to broaden his professional experience at DWR, Nate's future goals include providing DAC advice to the West Side Project planners about acceptable evacuation procedures. He also hopes to use his position with NFB to push efforts to make math, science and engineering more prominent in the education of young, blind people.

"Working at DWR has been a neat experience," said Nate. "I've gained professional experience and worked with outstanding people."

International Reflections on Flood Management

By Anna Torres

When the Central American nation of Honduras was hit by Hurricane Mitch in 1998, DWR engineer **Ricardo Pineda** got a first-hand look at the kind of catastrophic flood damage he works to prevent in California.

"I remember visiting Tegucigalpa, the capital of Honduras," said Ricardo. "Much of the destruction there was caused by poorly located residential development."

This is also a major problem in California, as delineated in DWR's January 2005 issue paper entitled, "Flood Warnings: Responding to California's Flood Crisis." It's one of the problems on Ricardo's mind daily as Chief of the Department's Floodplain Management Branch, working closely with The Reclamation Board.

***Ricardo Pineda** inspects the Sacramento-Yolo Regional Sewage Interceptor Pipeline groundwater diffuser on the Sacramento River downstream of West Sacramento.*

"Deterioration of the upstream watershed forest also contributed to flood damage in Tegucigalpa and elsewhere," Ricardo said.

(Flooding from Hurricane Mitch wreaked havoc in Honduras, Nicaragua, El Salvador and Guatemala, causing millions of tons of sediment to flow into rivers and streams where upstream watersheds had been damaged by poor land practices.)

Frequently visiting relatives in Honduras, where Hurricane Mitch claimed the lives of 5,600 people, gives Ricardo an opportunity to watch another country work toward developing flood warning and hazard mitigation programs similar to those still being improved in the United States.

In fact, Ricardo has a statewide, national and international perspective on flood management.

In addition to heading up the Division of Flood Management's Floodplain Management Branch, Ricardo is the California coordinator for the National Flood Insurance Program managed by the Federal Emergency Management Agency (FEMA). As such, he works at the national level to enable property owners in communities adhering to floodplain management regulations to purchase flood insurance

Ricardo, a native of Los Angeles and a civil engineering graduate of Santa Clara University who holds a Master's Degree in Civil Engineering from California State University at Sacramento, began his DWR career in 1980 as a Junior Civil Engineer. His experience with the Department includes developing computer models related to the State Water Project's water and power operations, as well as emergency flood response. He pulled extended duty during the floods of 1995, 1997 and 1998, as well as during last summer's flood of Jones Tract in the Sacramento-San Joaquin Delta.

"At the end of the 1997 event, I was assigned the role of Chief of the Flood Operations Center from 7 p.m. to 8 a.m.," Ricardo said. "I retained that role for the 1998 floods and part of the Jones Tract event."

Ricardo also has provided expertise to the Attorney General's office on flood-related litigation.

Today, Ricardo spends much of his time on floodplain mapping projects, providing technical advice to communities, assisting with bond programs, and working with citizens whose property may encroach upon or interfere with flood control projects.

Ricardo enjoys working with community and agency officials throughout California, and is currently working with Southern California flood control officials on alluvial fan and flood-related debris flows and landslides.

"Flood management is currently at a turning point," said Ricardo. "We are investing in physical infrastructure for the future and working with local governments to more effectively protect and educate citizens. It is an exciting time to work in flood management."

Although far too deadly, the California floods Ricardo has witnessed have not been as catastrophic as what he saw in Honduras in 1998. For that, Ricardo and his colleagues, together with a long line of those who labored before at DWR can take some measure of credit.

DWR Engineer Climbs to Roof of Africa

By Margarita Macias

***Milan Cernosek** reached the top of Mount Kilimanjaro in five days.*

Milan Cernosek has climbed mountains around the world. However, none of them compared to Mount Kilimanjaro, the "roof of Africa," which he climbed in February.

Kilimanjaro, one of the world's most recognizable peaks, rises 19,341 feet from the East African plateau in Tanzania, near the border with Kenya. It takes most climbers between five and eight days to climb the extinct volcano, a "non-technical" mountain that does not require specialized equipment to ascend. It took Milan five days to reach the summit, following a circular, 30-mile route with the most dramatic views.

"As you hike through the various altitudes of Kilimanjaro, you enter a variety of climates from 90-degree heat to below-freezing temperatures. I entered a tropical rain forest, moorland, alpine desert, snowfield, and ice cliff," said Milan. "Although all of the climbers suffered from altitude sickness at the top, it was truly an unforgettable and fascinating adventure. I definitely recommend others to go, especially since the glaciers are expected to melt down in approximately 20 years."

Milan drove a Land Rover to the park gate, where he met other climbers and guides.

The three climbers along with other crew members end their journey in the rain forest.

In addition to spotting several swift moving monkeys, Milan saw native people along with crops of coffee, bananas, corn, carrots, and potatoes.

Milan made arrangements for his climb via the Internet. The total cost of the climb, including food and two porters, was $900. The porters carried his clothing, food, and sleeping bag. Along with Milan, there were two other climbers, six porters, a guide, an assistant guide, and a cook.

Milan exercised daily for months to prepare physically for the climb.

"Staying fit has always been an important part of my lifestyle," said Milan. "In addition to learning martial arts skills, I have enjoyed jogging, hiking, and bike riding."

Milan's interest in climbing mountains began at age 20 in his native Czechoslovakia. After escaping Czechoslovakia in 1987, Milan stayed in refugee camps in Austria, where he climbed Mount Grossglockner. In 1989, he came to California, where he continued his climbing at Mount Whitney in 1993 and Mount Shasta in 1995.

"I have climbed Mount Whitney five times," said Milan. "For someone who is beginning to climb, Mount Whitney is a great place to start. This 21-mile roundtrip climb can be done in one day."

If Milan were to continue his climbs, Mount Everest would be next on his list. However, he has decided to terminate his climbs and spend more time with his family.

"With a wife and two young children, I decided it was too much of a risk for me to continue climbing," said Milan.

Milan has worked four years for DWR's Southern District Watermaster Section as a Senior Engineer. His assignment includes monitoring ground water extractions in Los Angeles County. Before joining DWR, Milan worked for the City of Santa Clarita for eight years.

Bennett appointed Chief of Office of Water Use Efficiency and Transfers

Bill Bennett, who has worked at DWR for 31 years, was appointed Chief of the Office of Water Use Efficiency and Transfers on April 4. He oversees the newly combined offices of Office of Water Use Efficiency and Office of Water Transfers.

Bill received a Bachelor's degree in Engineering and a Masters in Soil Mechanics from the University of California, Davis. He is a licensed Professional Civil Engineer as well as a licensed Geotechnical Engineer.

Bill's DWR career began in 1974 as a Graduate Student Assistant in the Division of Safety of Dams. His previous assignments include serving as District Chief in both Central and Northern Districts and Chief of the Division of Planning and Local Assistance. During his assignments on the "Bulletin 160 - California Water Plan" team, he was the Editor in 1993 and Manager in 1998.

Bill recently was Special Manager for Klamath Watershed Issues for the Division of Planning and Local Assistance. In this assignment, Bill worked as DWR liaison for water, endangered species, and restoration activities with local, State, and federal organizations.

"It's a pleasure to be working again with Water Use Efficiency staff. These professionals are very well thought of in the water industry and I feel lucky to be associated with them," said Bill.

"The water transfers and Environmental Water Account work that the new position brings is very interesting and I hope my broad experience in the Department and personal knowledge of the Department's people and capabilities will be beneficial."

Gutierrez Appointed Division of Safety of Dams Chief

Dave Gutierrez was appointed Chief of the Division of Safety of Dams on March 23. Dave, who has worked in every discipline of dam design, construction, and safety in his more than 20 years for DWR, was formerly Design Branch Chief.

Dave, a Sacramento native, holds Bachelor of Science and Master of Science degrees in Civil Engineering from California State University, Sacramento. He also has licenses in both civil and geotechnical engineering.

His DWR career began in 1980 as a Student Assistant for Safety of Dams. Dave's first Safety of Dams assignment was the review of a consultant's complex hydraulic analysis of a spillway at Lake Wohlford Dam.

"During my first assignment, I remember finding discrepancies in the calculations which, if gone undetected, could have resulted in serious dam safety implications," said Dave.

The Division of Safety of Dams exists to protect lives and property from dam failure. Dave remembers the recent completion of the Olivenhein Dam in San Diego County as a memorable career moment.

"It is the largest roller compacted concrete dam in North America," said Dave, who through his many roles saw the project from beginning to completion.

Dave shares his vast knowledge of dam safety as a member of the California Division of Mines and Geology's Strong Motion Instrumentation Advisory Committee, which is responsible for equipping dams and other structures with technology to provide insights on how they behave during earthquakes. Dave is also a member of the Association of State Dams Safety Officials.

Dave's new assignment allows him to work with a staff he calls "excellent." He is looking forward to continue working with them.

"I am optimistic about getting the Division through the tough budget years, but I have a plan to run the division as efficient as possible and keep a watchful eye on funding sources," said Dave.

Dave is also enthusiastic about coaching new engineers with his knowledge of dam design and construction.

"Division of Safety of Dams is a really great organization that attracts quality engineers," said Dave. "It's a pleasure to lead an organization with such good people."

Dave, who is married, has one daughter and resides in Clarksburg.

New Chief for the Colorado River and Salton Sea Office

Dale Hoffman-Floerke was appointed the new chief of DWR's Colorado River and Salton Sea Office in May.

"I'm excited to be chosen the Chief of the Colorado River and Salton Sea Office," said Dale. "This position will undoubtedly be the most challenging of my 27-year career with DWR. I am looking forward to applying many of the skills that I've acquired over the years, including being able to work with lots of stakeholders with very diverse backgrounds and interests."

In 1977, Dale started her career at DWR as a Student Assistant for Operations and Maintenance's Water Quality Section. After graduating from Humboldt State University with a Bachelor of Science Degree in Fisheries Biology, Dale was hired as an Environmental Specialist in the San Joaquin District.

"My duties at San Joaquin District quickly expanded to a wide range of environmental activities, including chairing the Action Team of the San Joaquin River Management Program," said Dale.

Dale transferred in 1991 to the Division of Planning and Local Assistance in Sacramento. Her assignment included working on a grant program created for ecosystem restoration. In 1994, while working for the Environmental Services Office, Dale worked to develop an Amended Recreation Plan for Lake Oroville. Dale became Environmental Program Manager I in 1997.

Before her new assignment, Dale was Chief of Division of Environmental Services' Environmental and Compliance and Evaluation Branch. In addition to supervising a staff of 20, Dale, was the Department's Wetlands Coordinator, and managed a variety of environmental compliance activities including cultural resources, terrestrial and botanical resources. She also worked on the FERC Relicensing Project. Dale's assignments included preparation of study reports and environmental documents as well as supervising land use, terrestrial and botanical resources, recreation, and cultural resources components of the public process.

"My DWR experience working in collaborative efforts, including the San Joaquin River Management Program and the Oroville FERC Relicensing, will be very valuable as I learned to work closely with other State, federal and local agencies as well as NGOs (Non- Government Organizations), local residents and other stakeholders."

Dale's goals and expectations for her new position are to get all parties and stakeholders to agree on one alternative that will not only meet the intent of the legislation that brought the State into the restoration effort, but also agreeing on a best solution for the restoration of the Sea.

"My goal is to work collaboratively with all interests and stakeholders to try to get them to buy into the process and ultimately come away with stakeholders feeling like they were part of the process," said Dale.

Professional Engineer Graduates

Congratulations to the following Professional Engineer Graduates.

Anthony Carpenter
Engineering
Mechanical Engineer
January 2005

Wen Y. (Grace) Chen
Engineering
Civil Engineer
January 2005

Felix Ko
Bay-Delta Office
Civil Engineer
January 2005

Robert Moore
Engineering
Electrical Engineer
January 2005

Derek Stewart
Operations and Maintenance
Electrical Engineer
January 2005

Twenty-five Years of Service

Kuldip Singh Atwal
Engineering
Senior Mechanical Engineer
June 2005

Wayne Cedidla
Engineering
Senior Mechanical Engineer,
Hydraulic Structures
June 2005

Bill Fraser
Safety of Dams
Chief, Geology Branch
May 2005

Mark Hopper
Operations and Maintenance,
San Joaquin Field Division
Senior Hydroelectric Plant
Operator
April 2005

Karl Jacobs
Environmental Services
Senior Environmental Scientist
March 2005

Greg Rowsey
Management Services
Chief, Personnel Office
May 2005

Freydoune Seddick
Engineering
Senior Engineer
May 2005

Larry Shuman
Planning and Local Assistance,
Northern District
Staff Information Systems
Analyst
March 2005

Gerald Snow
Flood Management
Water Resources Technician II
June 2005

Sterling Sorenson
Flood Management
Water Resources Engineering
Associate
March 2005

Carl Torgersen
Operations and Maintenance
Chief, SWP Operations Control
Office
April 2005

Cliff Winston
Engineering, Real Estate
Branch
Senior Land Agent
May 2005

Retirements

Rose Anne Danyluk's almost 30 years of DWR service not only included several promotions and various assignments, but also the chance to witness the growth of the State Water Project. Rose Anne retired in June as an Administrative Officer III with Southern Field Division.

"While working with five field division chiefs, I witnessed the addition of Alamo and Mojave Siphon Powerplants as well as the Devil Canyon Second Afterbay," said Rose Anne. "The construction of East Branch Extension and the Vista del Lago Visitors Center were also other historical projects."

Rose Anne started with Southern Field Division in 1976 as a Clerk Typist – Permanent Intermittent. "The job was only supposed to be part-time to earn a little extra income," said Rose Anne. "I was trying to earn enough money for a snazzy barbeque and vacuum cleaner."

But she decided to change her plans and join the Department full time to begin a career. She went back to junior college for her degree and took all of the promotional exams she was qualified for.

Rose Anne spent her entire career at Southern Field Division. After becoming an Office Assistant, she worked her way up the administrative ladder from Management Services Technician to Administrative Officer III. As Administration Branch Chief, some of her assignments included supervising a staff of 20 employees, coordinating the field division's budget and program control, warehousing, purchasing, and contract services.


Rose Anne Danyluk

"I have seen a lot of changes within the Department and have met a lot of people that I truly admire. I am most proud of the Administration Branch in the Southern Field Division, and for the personal and professional growth each employee has made," said Rose Anne. "They have contributed to our good reputation and credibility in the administrative area. I am thankful for their support."

Rose Anne has planned several activities for her retirement.

"I look to my retirement as another chapter in my life. I plan to 'dabble' in the legal and investigative field, travel, sleep in, try other career options, sleep in, hang out with my friends and enjoy my family with the intention of totally spoiling my three grandchildren Ryan, Jake, and Brooke. I have a lot to be thankful for," said Rose Anne. "I shall miss my 'home away from home' at DWR, but I am really looking forward to the future."

Edward Diamond, a Water Resources Engineer with the Bay-Delta Office, retired in May after 15 years with DWR.

"I'm going to miss the constant stream of technical challenges and working with talented people to resolve them. I hope to keep up my technical expertise through contract work with the Department or elsewhere," said Edward.

Edward started with DWR in 1990 in the SWP Water Quality Section, where he helped create a database to report on water quality constituents throughout the State Water Project.

He subsequently transferred to the Division of Flood Management, where he helped produce flood forecast bulletins, ran calibrations of forecasting models, and computer programming to improve forecasting software. Especially memorable during this period were the severe floods of 1995 and 1997 and the terrific effort to produce those bulletins around the clock for many weeks without a break. He also worked on water supply forecasting, helping to produce Bulletin 120 and its updates during the dry water years of 2001 and 2002.

In 2003, he moved to the Bay-Delta Office, where he was instrumental in creating a multi-user database system, which helps users of the new database version of the Delta Simulation Model 2 (DSM2-DB) create, store, share, and standardize their input data sets.


Edward Diamond

Edward plans to spend his retirement time doing more outdoor activities, like hiking, biking, and kayaking. He also plans to do some cross-country skiing, which is made easier with his new home within short driving distance of the Mt. Bachelor ski area on the east side of the Cascade Mountains in Oregon.

Edward is also looking forward to some new experiences and opportunities to develop some new skills, such as a little freelance writing.

"I am looking forward to discovering or re-discovering some of my other creative talents and finding a serendipitous opportunity to use them," said Edward.

Retirements *continued*

William (Bill) Mork has predicted weather all over the planet—Greenland and Germany, Texas and Vietnam. But in retirement, California's State Climatologist moved to Florida, bracing confidently for the humidity and hurricanes that lie ahead.

In over 22 years as DWR's Senior Meteorologist—and since 1983 California's State Climatologist—he has dealt with many major precipitation and flood events. 1983, one of the wettest years on record in California, brought special briefings and media contacts in his first flood season on the job. Major flood events followed in 1986 and 1997 and 1998.

Bill is probably best known for his timely January 1997 storm predictions that triggered dramatic headlines and enabled flood managers to make life-saving safety preparations for one of Northern California's biggest river system flood events.

For a January 10, 1997 article, San Francisco Chronicle reporter Carl Nolte tabbed him "the man who called the flood." Using state-of-the-art science, historic records and his instincts, Bill's predicted rainfall figures over a week in advance proved uncannily accurate—very close to the actual 25 inches in eight days for the Feather River Basin and peak 39 inches at Bucks Lake.

A tough-minded perfectionist at his profession, Bill is renowned throughout DWR for his machine-gun speed, acronym-studded weather briefings. For the past 22 flood seasons, he has presented daily weather updates for the Division of Flood Management staff and frequent briefings for SWP operators. He emailed a daily written weather newsletter to more than 1,400 subscribers.

"My ultimate job satisfaction comes from successful customer support," said Bill. "And from meeting so many nice people who need our weather services."

Florida retirement near Bradenton reunites Bill with many old Air Force friends, now retired there. It will be a homecoming of sorts. He earned his Bachelor of Science in Meteorology in 1959 at Florida State University, after earlier studies at Oklahoma State and Wichita State Universities.

Upon graduating from Air Force Officer Training School at Lackland Air Force Base (Texas) in 1961 and obtaining a commission as a Second Lieutenant, his first posting as a military weather officer was at Eglin Air Force Base in the Florida Panhandle. He married his wife, Marty, in 1961 in St. Stephen's Lutheran Church in Tallahassee. (He and Marty have three sons, who were all born at Air Force bases.) Though hot and moist, the Florida climate is expected to ease Marty's allergies and Bill's asthma.

Bill joined the Division of Flood Management in 1982 (an El Nino year) after retiring from the US Air Force with the rank of Major after 21 globe-trotting years as a Weather Officer. He served at bases in Germany (twice—at Ramstein and Wiesbaden AFBs), Texas (twice), California (at both Castle AFB near Merced and Travis AFB near Fairfield), in Vietnam and Greenland.

William (Bill) Mork

During the Vietnam War, Bill served as staff weather officer to the Army's First Cavalry Division, a helicopter combat unit. He was stationed at Phuoc Vinh, 50 miles northeast of Saigon. An enemy mortar attack greeted Captain Mork on his first night in camp. "Scared hell out of me," said Bill.

He earned a Bronze Star medal for providing weather forecasts and briefings in support of the First Cav's 400 helicopters.

Weather technology has advanced greatly since Bill set up his first back yard rain gage in 1949. Computer model predictions dramatically improved, from an 84-hour lead time in 1982, to a six-to-10 day period by 1985, to 16 days into the future via the Global Forecast System model.

Bill has written expert weather summaries for many reports, published comprehensive seasonal and storm summaries in bulletins following water years 1983, 1984, 1985, 1986, 1995 and 1997, and provided frequent briefings for SWP operations and SWP contractors.

Bill's professional excellence is well recognized. Governor Pete Wilson sent Bill a commendatory letter and certificate of appreciation for his work during the flood emergency of 1997. In 1992, Bill was honored with the Outstanding Professionalism Accomplishment Award and State Sustained Superior Accomplishment Award. While an Air Force officer, Bill earned a Meritorious Service Medal and three Air Force Commendation Medals.

A team player, Bill credits his supervisors and coworkers through the years (especially Chief Hydrologist Maury Roos), Associate Meteorologist Matt Winston, DFM staffers and other meteorologists with making possible the high quality of weather analysis DWR provides.

Bill earned a Master's from Golden Gate University in 1975 while in the Air Force. To educate students about weather, Mork for 20 years taught meteorology part-time at Solano Community College near Fairfield, where he was a longtime resident. Bill retired in June.

Retirements *continued*

Zealous baseball fan **Tom Speer** celebrated his retirement from DWR after 39 years of service with a spectacular farewell party on June 15 at Raley Field.

Starting in 1966 as an Engineering Aid in Red Bluff while Edmund G. (Pat) Brown was Governor, Tom briskly served in management posts under seven California Governors. He retired May 31 after heading DWR's vital Departmental Services Office for nearly five years.

As DSO Chief since 2000, he directed key facility management, mobile equipment, telecommunications, purchasing, contracts, management analysis and records units, supervising a staff of 170 and managing a budget of about $14 million.

"It was exciting, challenging and fun helping the Department modernize, adapt, and change during my four decades with DWR," said Tom. "I am proud that my entire career has been with DWR. It is an outstanding Department, has always had excellent management, and wonderful employees with whom I have thoroughly enjoyed working. I will really miss the people."

For over 13 years, from 1987 to 2000, Tom served as Chief of DWR's Information Systems and Services Office, an era of rapid, widespread modernization, especially in the fields of Information Technology (IT) and communications.

"When I first moved into the office there were only about 10 Personal Computers in the whole Department. We have really come a long way," said Tom.

Tom voiced pride for the many achievements during this period: first Internet connection in California State Government; first Web page by a State agency; and all DWR offices networked. DWR developed vital business applications using relational database technology, constructed a modern data center (the original data center was under the cafeteria and experienced a number of messy leaks) and provided for "hot backup" of critical systems at an off-site Department location. Tom was also instrumental is establishing the State's Data Processing Manager Academy, which just graduated its 12th class, and acted as a "Class Manager" for two academy's.

Tom's rise through management included a 1984-1987 stint as the first chief of DSO after a six-year tour of duty as Chief of the Management Analysis Office. The MAO job was heavy on analysis, studies, personnel issues and departmental organization, with major liaison to control agencies, boards and commissions. Tom was able to obtain approval for out-of-country per diem for Division of Design and Construction employees and the remote mileage program for Division of O&M field division employees.

As a skilled IT manager, Tom served twice as an IT management consultant to international organizations, applying his expertise in India to resource and management challenges in the field of water resources. During 1997-1999, he made two trips to India for the United Nations food and agriculture organization and the World Bank.

Tom Speer

"In India, I worked with officials in many government organizations and with members of the farm community," he recalled. "We worked on plans to modernize operations, and share and better utilize water resources data. It was gratifying to provide this kind of assistance to a developing community. DWR is light years ahead in comparison to what I saw there."

During 1994, he served as a World Bank consultant on an earlier Indian project. "Based on my findings and recommendations, the Bank changed their requirements for this project," said Tom.

When he began work in 1966 for DWR, Tom was sent to Garberville to work with a plane table survey crew – his first day on the job and first experience surveying. Tom changed to Permanent Intermittent in 1969 and returned to the classroom, graduating from Shasta Junior College in 1969. He earned a Bachelor of Science in Business Administration from Chico State in 1971.

While achieving steady promotions, Tom has blazed a few trails. He was the first person hired in June 1966 at the then-new Northern District Office in Red Bluff. In 1975, when reclassified from an auditor position, he became the Department's first Associate Governmental Program Analyst (AGPA). In 1977, he was promoted to Staff Services Manager II in the Program Analysis Office, Staff Services Manager III in DSO and then Data Processing Manager IV and CEA.

Tom plans to take a month off and then start working for a consulting company. He and his wife Colleen plan to continue traveling. They have three sons who live in Little Rock, Arkansas, Houston, Texas and Columbia, South Carolina so they already log many air miles and want to see more of the world. And, of course, take in a few baseball games.

Retirements *continued*

Carol Scott, Chief of Operations and Maintenance's Administrative Services Office, retired in April to pursue her hobbies and travel.

"I have thoroughly enjoyed working for DWR but have many other things to do in the next chapter of my life," said Carol.

Before beginning her 26 years of DWR service, Carol worked for three other State agencies. Carol joined DWR in 1968 as a Clerk I working for Central Records delivering mail on the second floor of the Resources Building. After six months, she moved to the Division of Planning, where she worked for four years until the birth of her first child. Then, she worked part time while raising her children and pursuing her college education at California State University, Sacramento. After receiving her Bachelor's degree, she returned to work full time for O&M. Carol was promoted from Office Technician to Staff Services Analyst and a few years later to Associate Governmental Program Analyst.

"One job in the Department that I always thought looked interesting and challenging was the Health and Safety Officer position," said Carol. "After beginning this new assignment in 1994, I truly loved it and felt that it 'fit like a glove'."

Although Carol felt there was a huge learning curve even after spending more than eight years in that position, she enjoyed each day's new and challenging assignments.

Carol's last DWR assignment was as Chief of O&M's Administrative Services Office.

"I felt very blessed that I was able to return to O&M," said Carol, who worked more than two years in this position. "I thoroughly enjoyed working for O&M and feel honored that I was able to return home for the last few years of my career."

Carol Scott

Carol has many other interests in her retirement plans. To help her husband, Sam, who owns a business as a painting contractor, she plans on putting on her coveralls and using her paintbrush and roller to help him. Since Sam is slowing his business down, there will be many plans for travel. Her travel locations include Greece, where Sam was born and raised. Carol is also very much looking forward to spending more time with her grandchildren by volunteering at their school, which is the same elementary school that she attended. In addition to remodeling and decorating her home, Carol's other interests include friend and family gatherings, gardening, cooking, sewing, bicycling, kayaking, and becoming familiar with her new computer.

"I feel very lucky to have worked for DWR. I have met many wonderful people at while working for DWR and have some very treasured friendships," said Carol. "I will miss my many friends I have made but plan on keeping in touch."

Retirements

Lloyd Brenn III
Environmental Services
Chief Engineer Fisheries Vessel

Albert Guyer
Operations and Maintenance
Precision Electronics Specialist

Keith Hoyt
Southern Field Division
Control Systems Technician II

Tommy Hunsaker
Southern Field Division
Senior HEP* Operator

Katherine Johnson
Fiscal Services
Office Technician (Typing)

Sterling Johnson
San Luis Field Division
HEP* Operator

Brenda Main
Planning & Local Assistance
Supervisor of Technical Publications

Jeffrey Patterson
Engineering
Principal Engineer

Freydoune Seddick
Engineering
Senior Engineer

William Smith
San Joaquin Field Division
Senior HEP* Operator

* Hydroelectric Plant

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

Retirements *continued*

Carl Hauge, Chief Hydrogeologist in the Division of Planning and Local Assistance, retired in December from DWR after 31 years with DWR and more than 41 years with the State.

"I think I'll miss two things about DWR the most. The first is all of the really knowledgeable and hard-working people in the Department that I've had the good fortune to work with over the years. And, secondly, a lot of the people I've had contact with asking questions or passing along information about water issues, especially groundwater. That group includes consultants, citizens, drilling contractors and others associated with the well drilling industry, academics, water managers, and regulators," said Carl.

After receiving his Geology degree from the University of California, Riverside, Carl began his DWR career in 1963 at San Joaquin District in Fresno. Then, his rising career with DWR took a slight hiatus when due to the budget cutback in 1969-1970, he was one of 50 or more people at DWR who were laid off because they lacked enough seniority.

"Yes, I still have my letter that says I am laid off from the Department," said Carl.

Fortunately, Carl and his co-workers had been made aware of the impending round of layoffs with time to spare. When the letter came, Carl had already been hired by the Department of Conservation's Division of Mines and Geology. He worked there for six years, mostly writing, editing and speaking to the general public about geology, minerals, earthquakes and land use.

Carl then moved to the Department of Forestry and Fire Protection, where he worked for four years on a study of forest practice rules and timber harvesting and their effect on watershed erosion and stream protection. Carl returned to DWR at Central District and later DPLA.

Among Carl's major accomplishments was the publication of a report to the Legislature about groundwater that contained recommendations for updating Bulletin 118 and groundwater data. That report, and a growing awareness in the Legislature of California's dependence on groundwater, may have helped the Legislature decide to provide for updating Bulletin 118.

"Bulletin 118-03 finally updated what we know about groundwater. My hope now is that with the basic descriptions on the Department's Web site, they will be continuously updated with new information as it is obtained," said Carl.

Carl and **Rob Swartz**, co-authors of Bulletin 118, also drafted a model ordinance for groundwater management and a list of components that should be considered for any groundwater management plan. Both the model ordinance and the list of recommended components are available in the Appendices of Bulletin 118-03. Carl has worked with many local agencies to develop their groundwater plans since the Water Code was amended in 1992.

Carl Hauge

In Fresno, Carl was put in charge of a study to predict the amount of land subsidence that would occur in a portion of the San Joaquin Valley.

"The USGS thought we were nuts to try to predict subsidence because they had been studying subsidence for 30 years and still hadn't tried a prediction. But the numbers were needed so the levees could be designed. Someday I'm going to look at the leveling records to see how much subsidence in that area has actually occurred," said Carl.

Carl started "Water Facts," a series about water issues, mostly groundwater. The series has been so popular in California that DWR has been receiving calls from people in other states about groundwater.

Carl has monitored the changing attitudes towards groundwater that have been emerging recently.

"There has been a growing awareness of the need to manage groundwater more efficiently, although the change in perspective is not quite keeping up with the increasing stresses on groundwater," said Carl.

According to Carl, there has been an increase in legislative interest in providing guidance for groundwater users and managers. Several Legislators have carried successful bills that specify certain requirements for use and management of groundwater, and overall better water management.

He has also observed that many county environmental health departments are working to protect the groundwater within their counties.

"In many counties, staff has become aware of the connection between protection of recharge areas, well standards that are enforced, and protection of groundwater. They are also trying to work more closely with the county planners," said Carl.

Retirement plans include spending a lot of time with his wife at their place on Puget Sound in Washington and visiting their daughter in Montana more often.

"There's lot of other places we would like to visit some time as well. We find that our time fills up pretty quickly," said Carl.

Carl Hauge Receives Water Education Foundation Award for California Groundwater Expertise

Carl Hauge, DWR's long-time leading expert on groundwater, this spring received a new award from the Water Education Foundation---the Carl Hauge award, named in his honor, for excellence in groundwater policy activities and education.

Presented by **Rita Schmidt Sudman**, the Foundation's Executive Director, at the WEF's 22nd annual Executive Briefing in March, it honors Hauge for four decades of research, scholarship, and leadership regarding California's 515 groundwater basins. Hauge began studying California groundwater in the San Joaquin District in the 1960s.

In an acceptance speech laced with warnings about the need to study and improve California's groundwater management, Hauge said that groundwater is "underground and invisible" and for these reasons has been called in the past "mysterious and occult". Even today it is still a mystery to many persons.

Many people, he said, think of groundwater, if at all, as a "cheap resource" and "private property", regardless of how pumping affects their neighbors. But it's a vital resource, providing 25 to 30 percent of California's water supply in average water years and even more during droughts. Moreover, managing it adequately costs more than most people are willing to pay.

When DWR began updating Sacramento Valley groundwater data in the early 1980s, many area residents wondered why they should be concerned about their groundwater. More than two decades later, a lack of detailed data about groundwater resources persists, though California's aquifers are being tapped more and more. And surface water, the source of recharge, is being transferred elsewhere.

"There's nothing like writing a large check without knowing how much is in your checking account, or in this case, building more wells without knowing how much groundwater is in your aquifer and how much can be recharged over the long term," said Hauge. Extraction and recharge of groundwater are critical issues in California groundwater management.

Hauge was also a coauthor of a major DWR report on groundwater (Bulletin 118-2003). Over 200 pages long, the report provides a wealth of technical, policy and management data on California groundwater. In 2004, the report received the Kevin Neese Award from the Groundwater Resources Association of California as a definitive groundwater resource document.

In addition to the lack of data for adequate groundwater management in many basins, Hauge said that other critical challenges imperil groundwater resources. Privatization of water rights may affect groundwater rights and the availability of groundwater. Development that depends on groundwater should be required to demonstrate that that groundwater is available, and recent legislation is aimed at requiring such evidence. And finally, there is the clash between groundwater law and surface water law. California law "does not recognize the connection between groundwater and surface water," explained Hauge, "despite the physical reality that groundwater extraction can affect surface water and surface water diversions can affect groundwater."

Hauge said that some people have wondered "about the suitability of using 19th and 20th century assumptions as the foundation of our water law in the 21st century, with its increased population and much higher stress on water resources." However, as others note, the law provides a degree of certainty for investment backed resources.

All these issues, he noted, are addressed in DWR's forthcoming 2005 update of the California Water Plan.

A longtime groundwater briefer for the public, DWR staffers, and Water Education Foundation tours, Hauge praised the Water Education Foundation for its effective efforts to educate Californians about water issues, including his professional specialty, groundwater.

Birth Announcements

Congratulations to DWR Parents in the Division of Environmental Services:

Kate Le, an Engineer, has a son named Evan Nicholas who was born on April 3 weighing 7 pounds and measuring 18 inches long.

Erin Chappell, an Environmental Scientist has a son named Nathan Robert who was born on April 15 weighing 7 pounds, 11 ounces, and measuring 22 inches long.

Nicole Darby, an Environmental Scientist has a daughter named Shannon who was born on May 5 weighing 5 pounds, 14 ounces, and measuring 20 inches long.

And Division of Planning and Local Assistance's Northern District:

Curtis Anderson, a Senior Engineer, has a daughter named Ella Amy who was born on July 11 weighing 8 pounds, 2 ounces, and measuring 21 1/2 inches long.

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

Retirements *continued*

It's only natural that **Lori Weisser** plans to spend her retirement designing women's handbags. Helping design some of the programs for California's most important water project has been her bag for years.

Lori leaves the Department of Water Resources after 24 years of State service. She's spent the last nine years of her career as a Water Resources Engineering Associate in the Municipal Water Quality Investigations Section of the Division of Environmental Services, where she planned programs and handled monitoring of water quality throughout California.

"I'll be hanging out more with my husband, Michael," said Lori. "He's a retired DWR engineer who's now working as a retired annuitant with Central District. I'll possibly do some traveling, home remodeling, and gardening. The biggest plan, though, is to expand my tiny home business – sewing. I'm working on a line of embellished purses."

Lori discovered her purse design passion when her son's prom date couldn't find a bag to match her dress. Her new cottage industry has already taken off.

"I've sold four or five purses already," said Lori. "I'm now designing a line of gym bags as well. In the meantime, I'm hoping Michael will help design a Web site to market the bags over the Internet."

Lori says it's fitting she ends her career working in the Bonderson Building. She started out 30 years ago as Paul R. Bonderson's Secretary when she was also hired as Secretary to the Chief of the Division of Planning and Research at the State Water Resources Control Board. After six years with the State Water Resources Control Board, Lori joined DWR in the 1980's as a Management Services Technician in Central District. By the end of that decade, she was an integral part of program design teams on award winning projects, including the Interagency Delta Health Aspects Monitoring Program. She was also part of the design team for the Special Multi-use Applied Research Technology Station.

Lori Weisser

Lori recalls helping design the just-dedicated Vernalis Water Quality Monitoring Station as her proudest achievement for the State.

"It was a two-year-long process that didn't look possible at first," said Lori.

She's credited with forging a consensus among residents of the San Joaquin River Club to gain access to their property along the San Joaquin River.

"Even though it was very frustrating at times, it was worth it," said Lori. "I worked with people I would have never had the opportunity to work with otherwise. I've made some lasting friendships."

Obituary

Former DWR employee **Carmen Mello** passed away on May 30 in Sacramento at the age of 59 from complications due to lung cancer.

Before joining the Calfornia Department of Food and Agriculture (CDFA) in 1996, where she was employed at the time of her death, she had more than 15 years of State service with DWR. Her DWR career began as an Office Assistant with Management Services. In 1993, she was promoted to Office Technician in Executive. After nine years with CDFA, her final position was as Management Services Technician.

Carmen (Garcia) Mello

"Carmen was a well-loved employee at CDFA and because of her always ready smile and generosity. She acted as the Office of Agricultural and Environmental Stewardship's unofficial good-will ambassador," said her Supervisor **Steve Shaffer**, Director of the Office of Agricultural and Environmental Stewardship. "Carmen was especially proud of her family and the significant contribution she made in the fight against breast cancer by participating in the breast cancer walk against last fall."

She is survived by her husband Donald, three children, two step-sons, and 11 grandchildren.

New Hires

Erdom Abraham
Delta Field Division
Engineer

Abiodun Aderonmu
Southern District
Engineer

Gilbert Aguilar Jr.
Southern Field Division
HEP* Operator

Marjorie Caisley
Planning & Local Assistance
Engineer

Karen Cathey
San Joaquin District
Office Technician (Typing)

Dong Chen
Planning & Local Assistance
Associate Land & Water Use Scientist

Concepcion Cobos
San Joaquin Field Division
Building Maintenance Worker

David Collier
San Joaquin Field Division
HEP* Mechanic I

Douglas Ellis
Southern District
Engineering Geologist

Megan Fidell
Planning & Local Assistance
Engineer

Danny Fisher
Operations & Maintenance
Precision Electronics Specialist

Allan Fong
Management Services
Personnel Specialist

Glenda Heath
Planning & Local Assistance
Office Technician (Typing)

Isreal Hill
Delta Field Division
Warehouse Worker

Sandra Jewell
Northern District
Office Technician (Typing)

Nancy Kampas
Flood Management
Engineer

Lincoln King
Bay-Delta Office
Engineer

Maria Lau
Operations & Maintenance
Systems Software Specialist I (Technical)

Douglas Macmullen, Jr.
Operations & Maintenance
Water & Power Dispatcher

Sandra Macsul
Operations and Maintenance
Executive Secretary I

Janee Marlan
CERS***
Senior Legal Typist

Mari McMahon
CERS***
Office Technician (Typing)

Emely Montemayor
Management Services
Office Assistant

Mark Nordberg
Planning & Local Assistance
Engineering Geologist

Jess Perez
San Joaquin Field Division
HEP* Mechanic I

Randy Pope
San Luis Field Division
Warehouse Worker

Leandro Ramos
Planning & Local Assistance
Staff Environmental Scientist

Anthony Salazar
Oroville Field Division
Heavy Equipment Mechanic

Laura Sharpe
Environmental Services
Staff Environmental Scientist

Steven Smith
San Joaquin Field Division
Utility Craftsworker

Yung Thai
Fiscal Services
Accountant Trainee

Sherri Toulouse-Bower
Management Services
Personnel Specialist

Tim Tran
Bay-Delta Office
Assistant Information Systems Analyst

Kristen Trejo
Flood Management
Office Technician (Typing)

Jessica Trevino
San Luis Field Division
Office Assistant (Typing)

Lisa Watson
Operations & Maintenance
Staff Services Manager II

Promotions

Don Anderson
San Joaquin Field Division
Senior HEP* Operator

Donald Arnett
San Luis Field Division
Assistant Utility Craftsworker Supt.

Michael Beaty
Engineering
Supervising Engineer

William Bennett
Office of Water Use & Efficiency
C.E.A.

Gerald Boles
Executive
Environmental Program Manager I (Supv.)

Peter Brostrom
Office of Water Use & Efficiency
Staff Land & Water Use Scientist

Frederick Bui
Operations & Maintenance
Supervising Engineer

Robert Burns
Safety of Dams
Engineering Geologist

Wayne Cedidla
Engineering
Senior Mechanical Engineer
Hydraulic Structures

Manuel Chabolla
San Joaquin Field Division
Water Resources Technician II

Reynaldo Chavez
Delta Field Division
Senior HEP** Utility Engineer (Supv.)

Michael Christenson
Engineering
Senior Mechanical Engineer
Hydraulic Structures

Cheryl Davis
Fiscal Services
Staff Services Analyst

Richard Draeger
Safety of Dams
Senior Engineer

Sandra Firch
Management Services
Associate Management Analyst

John Irby
Southern Field Division
HEP* Electrician I

Brenda Journagan
Management Services
Personnel Technician II

Susan Lee
SWP Analysis Office
Senior Engineer

Daniel McManus
Northern District
Senior Engineering Geologist

Linus Paulus
Engineering, Real Estate Branch
Associate Land Agent

Bertram Pierroz
Technology Services
Data Processing Manager IV

Andrew Pollak
Executive
Staff Counsel III

Vicki Price
Management Services
Staff Services Manager I

Peter Rigali
Southern Field Division
Utility Craftsworker Supervisor

John Vrymoed
Safety of Dams
Principal Engineer

James Williams
San Joaquin Field Division
HEP* Electrician II

*Hydroelectric Plant
**Hydroelectric Power
***California Energy Resources Scheduling

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

DWR MISSION *Statement*

To manage the water resources
of California in cooperation
with other agencies,
to benefit the State's people,
and to protect, restore,
and enhance the natural
and human environments.

STATE OF CALIFORNIA • DEPARTMENT OF WATER RESOURCES

DWR NEWS/People
Public Affairs Office
1416 Ninth Street, Room 252-21
Sacramento, CA 94236-0001